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ABSTRACT

These studies of the involvement of women in higher education in China, Nepal, and the Philippines provide a common framework for analysis. Each study is organized around five broad areas: socio-cultural factors, politico-economic factors, ideological factors, legal factors, and infrastructural factors. An analysis of the progress of women's participation in higher education presents, for each country, national statistics on the involvement of women in the higher educational system. An examination of socio-cultural factors affecting female participation in higher education attempts to identify and analyze factors that are inherent components of a social system and that influence women's participation in higher education. Significant policies, programs, and strategies for women's participation in higher education are outlined. An in-depth examination of empirical case studies that investigates the phenomenon of women's participation in higher education against the backdrop of the statistical profiles is discussed. Each study offers conclusions and recommendations. Tables of data appear throughout the studies. (DB)

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IN HIGHER EDUCATION:**

China, Nepal and the Philippines

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ABBREVIATIONS

APCAS	Association of Philippine Colleges of Arts and Sciences
CBR	Crude Birth Rate
CCP	Chinese Communist Party
CDR	Central Development Region
CEAP	Catholic Educational Association of the Philippines
CEDA	Centre for Economic Development and Administration
CERID	Centre for Educational Research Innovation and Development
CEU	Centro Escolar University
DECS	Department of Education, Culture and Sports
EDPITAF	Educational Development Projects Implementation Task Force
EDR	Eastern Development Region
FAPE	Fund for Assistance to Private Education
FWDR	Far Western Development Region
GDP	Gross Domestic Product
HMG/N	Her Majesty's Government of Nepal
IDS	Integrated Development System
KMT	Kuomintang (Nationalist) Government
MWDR	Mid-Western Development Region
NCR	National Capital Region
NESP	National Education System Plan
NGO	Non-Government Organization
NRCP	National Research Council of the Philippines

ABBREVIATIONS (cont'd)

NWO	Nepal Women's Organization
PACU	Philippine Association of Colleges and Universities
PAFTE	Philippine Association for Teacher Education
PAGE	Philippine Association for Graduate Education
PAVE	The Philippine Association for Vocational Education
PDK	Phi Delta Kappa
PRC	People's Republic of China
PROAP	Principal Regional Office for Asia and the Pacific
PSSP	Pambansang Samahan sa Sikolohiyang Philipino
SLC	School Leaving Certificate
SSNCC	Social Services National Co-ordination Council
TFR	Total Fertility Rate
TU	Tribhuvan University
WDR	Western Development Region
WSCC	Women's Service Co-ordination Committee

PREFACE

Within the framework of Unesco's Regional Co-operative Programme in Higher Education for Development in Asia and the Pacific, the Unesco Principal Regional Office for Asia and the Pacific commissioned three studies on women's participation in higher education in China, Nepal and the Philippines. The studies were undertaken in the broad context of the emphasis Unesco places on the promotion of status of women and their role in the society. The studies were designed by a group of scholars from the above three countries and Pakistan who had met in Bangkok in 1986 under the auspices of Unesco.

Unesco's first debt of gratitude is to the authors of the three studies: Sheng Shihan, Zheng Rinrong, Liu Huizhen and Xu Xuedong of China; Pushpa Shrestha, Kedar Man Pradhan, Suprabha Ghimire, and Shanta Singh of Nepal; and Paz Policarpio Mendez of the Philippines.

V.L. Meek of the University of New England, Australia has edited the studies and written the introductory chapter. Unesco is most grateful to him for this very important contribution.

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Muhammad Selim from Unesco co-ordinated the project.

Chapter One

INTRODUCTION

One of the most important socio-political movements of the 20th Century has been and continues to be the promotion of the inalienable human rights of women. No country, developed or developing, has been untouched by the demand for gender equality and the push for equal representation of women in all spheres of social activity: political, cultural, economic and educational. However, advancement of the status of women in many countries is still far from satisfactory. While the number of women participating in public life has increased, often their participation is relegated to areas deemed suitable for women and at the lower levels of the occupational ladder. Many studies explain gender inequality in terms of educational opportunity and socio-cultural values, norms and attitudes which discriminate against women.

In most countries, women constitute approximately 50 per cent of the population, and wherever they are denied the right of equal participation with men in national affairs, a great human resource which could be brought to bear on the task of national development is lost. Ensuring equal access to higher education is fundamental to promoting the status of women for both the good of the individual and that of the nation.

Female participation in education is generally low, and their participation in higher education is strikingly low, in many, though certainly not all, of the countries of Asia and the Pacific. Where female participation rates are relatively high, problems persist with regard to their representation in certain professional fields, such as engineering and law. Representation of women in certain higher education activities, such as, teaching, research, administrative and more importantly in decision-making, is still at a nascent stage in many countries. But it must be emphasized that circumstances vary from nation to nation. The three studies of female participation in the higher education systems of China, Nepal and the Philippines presented in this volume illustrate this fact.

The studies on female participation in higher education in China, Nepal and the Philippines arose from Unesco's general concern for the promotion of the status of women in society. The Research Design Meeting on the "Participation of Women in Higher Education" was held at the Unesco Principal Regional Office for Asia and the Pacific in Bangkok on 9-13 June 1986. At that meeting a general research design for the studies was agreed upon.

Objectives and focus of the three studies. One of the purposes of the Research Design Meeting held in Bangkok was to provide the studies of female participation in higher education in China, Nepal and the Philippines with a common framework.

Women's participation in higher education

The studies have achieved this goal insofar as it has been possible for them to do so. However, local circumstances, such as the unavailability of data, have prevented complete commonality in research design and focus. For example, it was originally intended that female participation would be examined over a ten year period at five yearly intervals: 1975, 1980 and 1985. But enrolment statistics and other pertinent data for each five year interval were not available for every country. It was also originally intended that statistics on female participation in higher education in each country would be broken down by field of study. Once again, unavailability of data prevented the achievement of this goal in every country (country specific methodological approaches and constraints are outlined in the introduction to each study). Nonetheless, on a broad conceptual level, each study is organized around a common framework: (1) an analysis of the progress of women's participation in the higher education system; (2) the identification and analysis of socio-cultural factors affecting women's participation in higher education; (3) review of policies, programmes and strategies for the promotion of women's participation in higher education; (4) in-depth empirical case studies of particular institutions and groups that highlight problems and issues relating to women's participation in higher education; and (5) conclusions and recommendations. These five themes constitute the main body of each country's report, prefaced by a general introduction and a section on 'background'.

The *analysis of the progress of women's participation* in higher education presents, for each country, national statistics on the involvement of women in the higher educational system. This section of the studies covers three main areas of participation: student participation, teaching and related functions, and policy-making and administration. The studies relied primarily on secondary sources of data: statistical reports of institutions and government and other agencies; statistical reports of international agencies; and statistical information made available through commissioned surveys. The studies also collected some institutional data through their own surveys and interviews, using sampling techniques.

The sections dealing with *socio-cultural factors affecting female participation* in higher education attempt to identify and analyse different factors which are inherent components of a social system and which influence women's participation in higher education. The factors were classified into five broad areas:

1. *Socio-cultural* factors, such as family influence, cultural norms and values, and prejudices;
2. *Politico-economic* factors, such as consciousness of rights and responsibilities;
3. *Ideological* factors, such as sex role perceptions and belief systems;
4. *Legal* factors, such as constitutional protection of equal rights, legislation and government policies; and
5. *Infrastructural* factors, such as the structure of the educational system, curricula content and design and support facilities.

The purpose of the sections on significant *policies, programmes and strategies* for women's participation in higher education is to provide information on those practices, policies and activities that promote female participation. Sources of information were the countries' constitution, laws, policy statements, national development plans, etc.

The purpose of the sections that provide the *in-depth empirical case studies* is to further investigate the phenomenon of women's participation in higher education against the backdrop of the macro profiles. The case studies focus on particular higher education institutions and particular groups (such as, samples of school students, higher education students, teachers, policy-makers and administrators, and alumni).

Each study ends with *conclusion and recommendations*. The recommendations are action-oriented.

The remainder of this introduction is devoted to highlighting the main findings of each study. The discussion of each country will be organized around the broad framework outlined above.

Findings

China

Analysis of the progress of women's participation in higher education. Since the founding of the People's Republic of China (PRC) in 1949, significant progress has been made with regard to females' participation in higher education. Before the founding of the PRC, the highest number of female students enrolled in undergraduate courses occurred in 1947: 27,604 female undergraduates constituting about 18 per cent of total enrolment at this level. By 1985, not only had the number of female undergraduate enrolment increased to more than one half of a million students (510,586), but also their proportion of total enrolment had increased to nearly 30 per cent.

Although substantial progress has been made, it also needs to be recognized that females in China are under-represented in higher education in comparison to the participation rates of their male colleagues. There is also a good deal of regional variation in terms of number and proportion of female students, with a slightly higher rate of female participation in the more 'urbanized' regions and in the institutions with a concentration in those fields which are generally regarded as 'female', such as teacher education. Although nation-wide statistics are not available, those from specific institutions indicate that female students are disproportionately concentrated in the liberal arts rather than in the natural sciences, and the proportion of female enrolment in the liberal arts has increased over time. While female students are under-represented in institutions of higher education, there is some evidence to suggest that, on average, their academic performance is better than that of their male counterparts.

Women's participation in higher education

At the post-graduate level, Chinese female students have also made substantial gains over time. The number of Chinese female post-graduate students increased from 790 in 1963 to 16,216 in 1985. However, their rate of participation at the post-graduate level (about 19 per cent of the total number of post-graduate students in 1985) is even lower than that at the undergraduate level. At the Ph.D. level in 1985, there were 264 females studying for the degree, about 9 per cent of the total.

The proportion of female teachers in Chinese higher education institutions mirrors that of female students. In 1985, about 22 per cent of the academic workforce was female. Moreover, with regard to the distribution of male and female teachers across academic rank (professor, associate professor, lecturer, etc.) there is a disproportionate concentration of females in the lower ranking positions. In 1985, out of the 4,674 full professors, 282 were female.

Females in China do hold influential administrative and policy-making positions. However, most political and administrative cadres are male. A detailed break down of female/male administrators and policy-makers in institutions of higher education was not available.

Socio-cultural factors affecting women's participation in higher education.

With regard to factors affecting female participation in higher education, tradition, as a debilitating factor, looms large. In any society, past traditions, social norms and values and social prejudice die hard. Since 1949, much of China has been transformed – part of the social platform of the PRC is gender equality – but still traditional attitudes towards women linger. Women constitute more than two-thirds of the estimated 200 million illiterate population in China. While women enjoy equality under the law, still many employers would rather recruit male rather than female employees. Economics also work against female participation, particularly in the rural regions where child labour is essential for the economic survival of the family. Also, some families regard the education of females as an economic waste for their productivity will be lost to the family unit upon marriage. In terms of educational infrastructure, there is a lower proportion of females than males enrolled in primary and secondary schools, a problem which again is compounded in rural areas. One survey indicated that only 2.46 out of every 10,000 women in rural areas received middle school education.

Policies, programmes and strategies to promote female participation in higher education. Most policies, programmes and strategies that promote female participation in Chinese higher education have been developed since the founding of the People's Republic of China in 1949. The Chinese Communist Party has always attached great importance to women's liberation and their education, and the Party regards the women's movement in the fields of politics, economy, culture and education as an important part of national development.

The Constitution and the law protect women's rights in all areas: political, economic, cultural, educational and social. Women's right to equal participation in the political process is guaranteed, and, under the law, women are subject to the same obligations, opportunities and responsibilities as men. The feudal marriage

system that sanctioned arranged marriage has been abolished, and bigamy, child brides, and interference in the freedom of widows are forbidden.

Women exercise their right to vote and to stand for public office. As mentioned above, both government and institutional administration is male-dominated. But the participation of women in administration and policy-making is increasing. There are, for example, 5,600 female legal officials holding positions like president of court, chief of court, and judge. The government attempts to place women with ability in leading positions.

In China, all workers, male and female, enjoy equal pay for equal work. Since the founding of the PRC, the number of females engaged in productive work has increased dramatically, from about 610,000 female workers in 1949 to nearly 42 million workers in 1983. Over one-third of the national workforce is female.

In-depth empirical studies. Three universities were chosen for detailed investigation: Qinghua University, Beijing University and Beijing Normal University. The educational profiles of these institutions varied somewhat from the national pattern. The three institutions are all located in the national capital, and Beijing has a more advanced economy and social life than many other parts of the country.

Of the three institutions examined, Beijing Normal University, with its emphasis on teacher training, had the highest proportion of female enrolment. Nearly 50 per cent of the students enrolled in Beijing Normal University were female. Also, about one-third of both the post-graduate students and the teachers were female. Female participation rates were much lower in Qinghua University, which had a heavy commitment to engineering education. As is the case in many countries, in China, high rates of female participation in higher education seem to occur in those courses and institutions that cater to the professions traditionally regarded as suitable for women.

The results of a survey of a sample of Chinese students showed that most of the female students (nearly three-quarters) were confident about their studies and the future. The females sampled seemed to be more self-confident than the males sampled.

The female teachers sampled seemed to have a strong sense of career and most said that they were satisfied with their work. Some of the factors identified as contributing to the success of professional women were: ambition and devotion to career; desire to obtain and extend knowledge; and self-respect.

Conclusions and recommendations. The conclusions drawn from the study support several recommendations. First, it is pointed out that there is a dual component to the contribution that women make to the development of the nation: women contribute to development both through their professional expertise and through their roles as mothers, nurturing and helping to educate the next generation. This dual productive role played by women – economic production and human reproduction – should be recognized and better supported by society through such measures as more generous maternity leave and increased provision of childcare facilities. Second, while in terms of most industrial regulations, women enjoy the

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same rights as men, they are obliged to retire five years earlier than men. Women should be allowed to retire at the same age as men, allowing them to pursue their careers at a time in life when many family responsibilities have been discharged. Third, the last remnants of traditional prejudice that hinders female participation in higher education and their status in society in general should be removed; and fourth, one practical means of accomplishing this goal is to establish both specific institutions and units within existing institutions that cater to the needs of women. This should be done at all educational levels. Fifth, more women should be recruited into administrative and policy-making positions. But it is recognized that the low participation of women in administrative and decision-making roles is not the sole problem of higher education institutions. Women's participation in leadership positions is intrinsically linked with the development of society as a whole. Finally, the lack of basic data and research on women's issues should be remedied. Adequately financed inter-disciplinary research centres should be created to investigate the role of women in Chinese society and to suggest practical means of raising the status of women in society.

Nepal

Analysis of the progress of women's participation in higher education. Advancement of the status of women in Nepal is still far from satisfactory. Both the actual number and the proportion of females in higher education are low, and few females participate in administration and decision-making. Roughly one-half of Nepal's population of 16.5 million people are women, but in 1985 only 12,629 women were enrolled in the Technical Institutes and General Faculties of the country's public Tribhuvan University (TU). This figure constitutes about 23 per cent of total enrolment. In addition to TU enrolment, 1,674 women attended private campuses in 1985 (about 17 per cent of private campus enrolment). The private campuses began in 1980 and, for the most part, have limited educational profiles (for example, they do not teach beyond the bachelor degree level). Of the 1,674 female private campus students, 1,543 were enrolled in certificate type courses (i.e. pre-bachelor degree level courses) in the humanities and social sciences.

The vast majority of female students enrolled (nearly three-quarters) in TU were also concentrated at the certificate level in the General Faculties. At the bachelor degree level, 93 female students were studying in the Technical Institutes and 1,837 were enrolled in the General Faculties. At the post-graduate level, five female students were enrolled in the Technical Institutes and 604 were engaged in courses offered by the General Faculties.

The number of women who participated in Nepalese higher education in 1985 was nearly twice that of 1980. In 1980, only 6,641 female students were enrolled in TU (about 20 per cent of total enrolment). The near doubling of female enrolment in five years is a substantial accomplishment, but the small size of the number involved must also be noted. Obviously, participation in higher education is highly restricted for all Nepalese citizens, and even more so for females.

Nepalese geography makes development a slow, expensive and sporadic task. There are gross differences in the rates of female participation in higher education according to region. In terms of government defined development regions, nearly two-thirds of the female higher education students in 1985 studied at campuses located in the Central Development Region where the national capital is situated. Few higher education facilities were available in other parts of the country. In terms of geographical region, for example, no higher education facilities existed in the Mountains Region before 1985.

In 1985, 600 or about 18 per cent of the total TU teaching staff were female. Proportionately, there are less female teachers than there are female students. But, like students, the majority of female teachers are concentrated at the lower end of the higher educational status hierarchy. Of the 600 female teachers, 488 were situated in the General Faculties, 101 were employed by the Technical Institutes, and 11 were associated with the Research Centres. Only 13 female teachers compared to 225 male teachers held doctoral degrees, and, in terms of academic rank, while nearly 12 per cent of the male teachers were either readers or professors, only about 5 per cent of the female teachers held equivalent positions.

University administration is also male dominated, both in terms of numbers and hierarchical position. Of the 274 administrators working for TU in 1985, 44 were female. Only two of these female administrators held positions above that of assistant administrator (the lowest rank of those listed).

Socio-cultural factors affecting women's participation in higher education.

History, tradition, religion and geography affect all aspects of Nepalese life, including women's participation in higher education. Nepal is a Hindu Kingdom and most of its people are either Hindus or Buddhists. Hindu scriptures advocate the morale and intellectual excellence of all people, including women, and over the centuries there have been several women philosophers, writers and poets whose intellectual contributions have remained highly respected. But religious philosophy becomes intertwined with local social, cultural and economic imperatives and, in the process, is often diverted from its original intentions. In Nepal, traditional beliefs have been used as justification to deprive women of their inalienable rights. In the zeal to preserve chastity, for example, girls were given away in marriage at 72 months. Also, many parents viewed their daughters as an economic liability, and their sons as the natural extension of the economic, religious and cultural branches of the family tree.

Traditional attitudes are changing in Nepal, but in a developing country where about three-quarters of the population are illiterate, the process is slow and difficult, particularly in the less advanced rural regions where many people are dependent upon subsistence agriculture for survival. About 96 per cent of the active female labour force in Nepal are involved with agriculture. The Nepalese Constitution guarantees equal rights under the law to all citizens. But problems persist in several of the poorer and ill-educated communities.

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The building of an educational infrastructure started late in Nepal and the primary and secondary systems still do not accommodate all school age citizens. But at every level of schooling it is the females who are most disadvantaged. In 1985, about 70 per cent of the first grade enrolment were male and 30 per cent were female. At the School Leaving Certificate level, the gender split in enrolment increased to about 77 per cent male and 23 per cent female. With regard to gender and age group participation rates, in 1985 at the primary level, all of the boys aged 6 to 10 years were in school, while less than one-half (47.6 per cent) of the girls of the same age were in school. At the secondary level, 36.7 per cent of the boys of an age to attend secondary school were enrolled, while only 12.5 per cent of the girls of the same age enjoyed this privilege. The discrepancy between male/female educational participation rates starts at the primary level and the gap continues to widen with each level of schooling.

Policies, programmes and strategies for the promotion of women's participation in higher education. The emergence of Nepal as a modern democratic state only began in the early 1950s. But since then, each five year development plan has recognized that raising the status of women is intrinsically linked with the development of Nepalese society as a whole. The Seventh Development Plan devotes a separate section to the enhancement of the status of women and proposes specific measures to accomplish this objective. It recommends, for example, the commencement of special programmes for girls in educationally disadvantaged areas. Also, family planning, maternal and child health programmes, programmes designed to raise women's levels of education and training and strategies to increase women's employment opportunities are encouraged.

Relevant government agencies place special emphasis on increasing female participation in education. Female students in the more remote regions are provided with free textbooks for grades IV and V. Scholarships and other incentives are provided in order to encourage more females to stay on at school. Preference is given to women in the teacher training programmes. Also, various non-government agencies, such as the Women's Services Co-ordination Committee and the Nepal Women's Organization, are involved in activities designed to promote the interests of women. Some of these activities are: literacy programmes, family planning, legal aid, and training programmes for income generation.

In-depth empirical studies. A brief review of the educational profiles of the various Technical Institutes – such as the Institute of Forestry, the Institute of Agriculture and Animal Science, and the Institute of Medicine – highlights just how few women do participate in Nepalese higher education. For example, of the 489 students enrolled in the Institute of Forestry, 29 were female, and all students belonging to the Institute of Agriculture and Animal Science were male.

Although female participation in higher education is weak, the sample surveys of female school and university students yielded encouraging results in that the respondents expressed a strong desire for more education and career advancement. All of the female secondary school students surveyed, for example, indicated a desire to gain higher qualifications. Moreover, most of the students wished to gain

qualifications above the certificate level, and more than one-half of the students identified Medicine and Science as the fields in which they wished to study. It is also important to note that the majority of the female students sampled said that their parents recognized the importance of higher education.

Of those students sampled who were already engaged in higher education, the majority said that they chose their field of study because of personal interest, rather than because of family pressure or for other reasons. More importantly, the data revealed that the main factor facilitating the female students in pursuing higher education was their guardians' support and encouragement. This was true regardless of their guardians' occupation. The effect of familial values and attitudes on the destinies of young women cannot be over-emphasized.

Conservative social outlook, poor economic conditions, household duties, early marriage, and sexual prejudice were listed by the female university students as some of the factors responsible for low participation of women in higher education. Other factors identified were the perpetuation of traditional values and prejudices by women themselves, illiteracy among parents, low female enrolment in schools, and distance between home and campus.

Of the university women alumni surveyed, the majority also identified the support and encouragement of guardians (parents and husbands) as primary factors facilitating their pursuit of higher education. The women alumni suggested several measures to enhance the participation of women in higher education: special provision of job opportunities for women; sharing of decision-making and household responsibilities between men and women; change conservative social values; provide free education for women; discourage early marriage; and increase awareness among parents and women themselves of feminist issues.

Of the female university teachers sampled, the majority (69 per cent) said that they were happy, economically secure and proud of being teachers. The female teachers identified several factors they thought responsible for the low participation of women in higher education: illiteracy among parents and prejudice against daughters; conservative social attitudes; poor economic conditions; lack of institutional support; and geographical location. The administrators and policy-makers sampled also placed factors responsible for the low participation of women in higher education in the broad categories of social, economic, educational and geographical. Several measures were suggested to enhance the status of women, such as: increase parental awareness of the importance of education, regardless of sex; increase employment opportunities for women; change social attitudes; and free and compulsory education for women.

Conclusions and recommendations. Problems associated with female participation in higher education do not rest solely with the higher education system *per se*. Rather, they need to be perceived as an integral part of a much broader and highly complex situation associated with national development. With this caveat in mind, specific recommendations for the enhancement of female participation in higher education were advanced. Most of the recommendations could quickly be translated into policy, such as: the establishment of female enrolment quotas in

higher education; more publicity on the importance of female education; preferential treatment of females in terms of the award of scholarships; free and compulsory education for all citizens up to the School Leaving Certificate level; and the creation of a research centre to document and further investigate the role of women in Nepalese society. The most important recommendation, however, is the one most difficult to accomplish, that is, change the traditional social and cultural norms, attitudes and values that discriminate against women. But the adoption of the other recommendations having immediate policy implications would be a step in the direction of totally removing gender prejudice from Nepalese society.

The Philippines

Analysis of the progress of women's participation in the higher education system. Higher education in the Philippines consists of a very large private (sectarian and non-sectarian) sector and a small public (state) sector. In 1985, public higher education institutions enrolled less than 10 per cent of the total number of slightly more than 1.2 million higher education students.

In China and Nepal, far fewer females than males participate in higher education. In the Philippines, the reverse applies. In the Philippines, at the undergraduate level in 1985, about 62 per cent of the enrolment were female students. Only in a few fields of study – humanities, religion and theology; law; engineering; architecture and town planning; transport and communication; agriculture, forestry and fishery; and criminology – were there more male than female students. Moreover, in most of these fields, the number and proportion of female students have increased since 1975. Engineering was the field with the highest number of male students, 145,439 in 1985. Nonetheless, in the same year, there were 34,066 female engineering students, an increase of 14,119 over 1975 figures.

In many countries where the number of female higher education students equal or surpass the number of male students, this occurs only at the undergraduate level. But not so for the Philippines. In 1985, out of a total of 26,631 master degree students, 19,431 or about 73 per cent were female. Only in humanities, religion and theology, law, architecture and town planning, agriculture, forestry and fishery, and criminology were there more male than female master degree students, and total enrolment in most of these fields were small. It is interesting to note that in the 1985-1986 academic year, there were 25 female master degree students enrolled in engineering compared to nine male students. Of the 1,512 students studying at the doctoral level, 1,058 or about 70 per cent were female.

The number of female students receiving scholarships and academic awards was consistently higher than that for male students, except in law and engineering. As would be expected from the enrolment statistics, the majority of university and college graduates are female.

Generally, the pattern of the gender distribution of the teaching force conformed to that of students. About 60 per cent of the teachers were female and 40 per cent were male. Female teachers were also well represented across the

various academic ranks. About 66 per cent of the professors, for example, were female. While most teachers were married, it is interesting to note that of the 6,443 who were not married, 63.4 per cent were female. This may suggest that more females than males need to sacrifice having a family for the sake of a career. Female teachers were just as well-qualified as their male colleagues. Of the 1,185 teachers who held doctoral degrees in 1985, for example, about 58 per cent were female.

While women seem to be over-represented in relation to their proportion of the population as students and teachers, this is not the case with regard to administration. In 1985, about 60 per cent of the top managers (presidents of universities and colleges, vice-presidents, etc.) were male. It is important to note, however, that the participation of women at the top management level seems to be improving over time. In 1975, nearly 69 per cent of the top managers were male. The number of employees at the middle management level was more or less evenly split between males and females.

Factors affecting female participation in higher education. While Filipino society holds to norms of egalitarianism, the society also emphasises the sovereignty of the family and the responsibilities of motherhood. It is not uncommon for mothers to have to stop study or employment in order to attend to children. Culturally, the economic and social role of women in the family is often seen to be secondary to that of men. With regard to participation in higher education, sons may be given preference over daughters, and it is not uncommon for sons to be given preference over daughters in the choice of the more prestigious and educationally expensive professions. But enrolment statistics strongly suggest that cultural traditions prejudicial to the participation of women in higher education are weakening in the Philippines. Moreover, there is research to suggest that family influence is not the most important factor in the choice of a profession. Students' own choice ranks first and parental preference ranks third.

A primary factor positively affecting the status of women in society is the introduction of women into important positions of socio-political responsibility and resultant appropriate role-models. For example, the current President of the Philippines is a woman.

The status of women is being raised, but they remain under-represented in certain professional areas: law, engineering, architecture, forestry, theology and criminology. While women have always had access to paid employment, it needs to be recognized that their participation has been concentrated in areas traditionally reserved for women – such as teaching and nursing – or in areas of employment that could be based within or in connection to the home – such as pharmacy or dentistry. But it is also clear that females are making inroads into those professional areas traditionally regarded as male preserves.

Policies, programmes and strategies for the promotion of female participation in higher education. One of the most important policies that has promoted the participation of women in higher education was the early introduction of co-education in many colleges and universities. Co-educational public and private

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non-sectarian universities and colleges have existed for some time, and Catholic convent colleges for women date back to the Spanish era. The interest of co-educational education was furthered by the general expansion of higher education that followed World War II and economic circumstances. It was more economical and cost-effective to educate men and women together rather than separately.

The rights of women are protected under the law. Legislation provides female workers with job-security, maternity leave and nursery privileges. The Constitution protects women's right to vote and participate in the political process.

In-depth empirical studies. The case of Centro Escolar University (CEU) clearly illustrates the rising status of women in Filipino higher education. Granted university status in 1932, by 1985 CEU enrolled 17,299 college and graduate school students, of whom 14,385 were female. CEU started as a school for girls, but became co-educational in the early 1930s. The faculty is also primarily female; of the 403 faculty members, 314 are women.

Interviews with students produced some interesting results. While students said that their main reason for participating in higher education was the anticipation of a 'stable job' upon graduation, they also demonstrated a strong desire to use employment to help their families and the development of the nation. The majority of CEU graduates seem to be gainfully employed and able to utilize the qualifications gained at CEU in their chosen profession. Just as important, graduates indicated that the CEU experience not only assisted them with their jobs, but also was of use to them in all aspects of life. The few graduates who lacked employment planned to enter the workforce once circumstances – such as being able to send children to day care centres and school once they were old enough – allowed them to do so. Several members of the CEU Graduate School Alumni have risen to top administrative and decision-making positions within the country.

Conclusions and recommendations. The participation of women in nearly every aspect of higher education seems well-developed in the Philippines. Only in certain fields, such as engineering, and at the top management level in administration, does there seem to be room for improvement. And the evidence does suggest that imbalances in these areas are starting to be corrected. Nonetheless, a number of recommendations can be advanced to help improve both the position of women in higher education and the development of the higher education system as a whole. First, the opportunity for teachers to engage in research is limited and measures to correct this situation should be introduced. Reduced teaching load, release time and research funds are required in order for more female academic staff to be able to undertake research. Second, there is a need to examine the curriculum at the higher levels of study so as to better meet the development needs of the country. Third, future expansion of the higher education system should occur in the private rather than in the public sector. Public higher education institutions have served as important models in terms of academic standards, but they should not compete with private colleges. Fourth, the future development of the higher education system should be more concerned with quality than with quantity. Finally, more women

should be recruited to the top management level within higher education institutions. Given the fact that ability and performance are the main criteria for promotion, this should not be too difficult a task.

Summary

The three national studies of female participation in higher education contained in this volume point to remarkable differences in the extent and character of the participation among the countries. In China and Nepal, the participation rate of women falls far below that of men. Of the three countries, Nepal not only has the lowest female participation rate in higher education, but, also in terms of actual numbers, has recruited very few women into its higher education system. In contrast to China and Nepal, women in the Philippines seem to be over-represented in nearly every aspect of higher education. How can these differences be explained?

It is beyond the scope of this volume to provide a detailed comparative analysis of female participation in higher education between the three countries. But there is one common theme which deserves mention here, and that is *tradition*. Women in China, and those in Nepal in particular, seem to be barred from full participation in society by traditional prejudicial attitudes towards women based on each countries' religious, social and cultural past. The socio-cultural values on which Filipino society is based seem to be more conducive to the raising of the status of women. Though changing, the social and cultural attitudes of China and Nepal favour the male over the female. And where these attitudes are most evident and have their greatest impact is in the family. For various cultural, religious and economic reasons, many families, particularly those in the more isolated regions, promote the interests of the son while allocating their daughters to a male-subservient role. The studies of female participation in China and Nepal highlight the fact that the majority of female students who do participate in higher education come from families that both recognize the value of higher education and are prepared to support their daughters in gaining higher educational qualifications. The studies also point to a growing interest among women themselves to raise their status and increase their participation in all aspects of national development.

Social scientists have long recognized that social attitudes and values are difficult to change. Moreover, a change in attitudes and values does not occur in isolation from change in other social, political, cultural and economic aspects of a society. The participation of women in higher education should not be viewed as a problem in isolation from other factors affecting national development. The more that women are encouraged to participate in higher education, administration and policy-making, the more evident it will become that they have a substantial contribution to make to social development; and once this fact is well-established in the minds of the people, traditional prejudices should begin to disappear.

Chapter Two

PARTICIPATION OF WOMEN IN HIGHER EDUCATION IN CHINA

by

Sheng Shihan, Zheng Rinrong, Liu Huizhen, and Xu Xuedong

Introduction

Consideration of the role of women in Chinese society raises several important issues: the role of women in modernization, formation of a new 'type' of feminist outlook, employment opportunities, the development of female intellectuals, the social value of women's dual productive role (socio-economic production and human reproduction), and the role of women's emancipation in the context of general cultural transformation. While there have been a number of historical studies on the role of women in Chinese society¹, the study of women is largely a new branch of research in China.

Women's level of education, social equality and accomplishment bear directly on such factors as cultural development and the supply of high level manpower necessary to stimulate and sustain socio-economic production. The political, economic, and social positions of women in a given country largely reflect the degree of development of that country. It is often asserted that the degree of female participation in higher education is closely associated with the destiny of the nation. Larger numbers and a wider range of female participation in higher education will enable women to have more opportunities to engage in high level decision-making and management and subsequently contribute to the spiritual and material development of the country.

Throughout the 20th Century, the women's movement grew in significance. As the movement gained momentum, women's economic, political and social status as well as their cultural equality were greatly improved and their access to education and employment increased. However, in terms of the global framework, true equality between men and women has yet to be reached. A smaller proportion of

1. Before 1949, a number of works on women was published, notably: *Life of Chinese Women*, by Chen Dongyuan; *History of Chinese Ancient Marriage*, by Chen Guoyuan; *History of China's Prostitution*, by Wang Shunu; *Study on the Foot-Binding of Chinese Women*, by Jia Zhong; and *Customs of Marriage and Funeral of Han Dynasty*, by Yang Shuda.

girls than boys attend school, and women's employment opportunities are limited. The situation in some developing countries is particularly disturbing.

According to the third national population census (July 1982) China now has 470 million women who make up 48.5 per cent of the total population. In China's socialist construction and modernization drive, women play a crucial role.

In China, the cry for "equality between men and women" was voiced in the early days of the Republic by Dr. Sung Yatsen, the pioneer of the Chinese revolution. Following the "May Fourth Movement" in 1919, the issue of women's liberations swept the country. However, women's emancipation was realized only after the People's Republic of China was founded in 1949. The government has provided the conditions necessary for the achievement of sexual equality in all aspects of social life. Through legislative and administrative measures, Chinese women have won legal equality. Chinese women now enjoy rights to employment, property, election to public office, participation in decision-making processes, etc. However, in the society and even among women themselves, a considerable number of people, subject to feudal conceptual influence and traditional bondage, are not fully conscious of their rights. There is still a long way to go before true equity and equality are realized. As mentioned above, women's issues have attracted some attention from researchers. But few studies have been made so far on female participation in higher education. As a result baseline data are lacking, statistics are incomplete and the overall picture is unclear.

Education at all levels is an impetus to social development, and the education of half of the population inevitably stands out as a prominent problem. Women should secure equal rights to education which will enable them to enrich and develop themselves and in the process achieve true equality in terms of economic, political and social participation.

Methodology. A large quantity of documents, monographs, magazines, periodicals, statistical year books, etc., was consulted and the researchers visited a series of departments and ministries. These units included: relevant bureaux, departments and centres in the State Education Commission, Ministry of Human Resources, National Women Federation, *China Women* magazine, *Journal of Chinese Women*, Institute of Human Resources of the State Science Commission, Beijing Higher Education Bureau, Education Commissions of Fujian and Guangdong and Huanang Women Institute of Fujian Province. Sample surveys were conducted among five institutions of higher learning.

A mailed questionnaire was sent to various provinces, municipalities and universities. The questions dealt with five broad topics: (1) background information on female students, undergraduates and graduates, and basic statistics on female rates of participation; (2) basic information on female faculty members; (3) the attitudes of authorities towards women's education and employment; (4) problems and difficulties of female students and teachers and the identification of possible solutions; and (5) suggestions on the improvement of the role of females in higher education.

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The questionnaire was distributed among various units and groups of university female students and teachers. Due to reasons beyond the control of the researchers, the statistics and information gathered were incomplete.

The research team organized discussions with females in five universities, addressing such issues as subject selection, career aspirations, academic record, family background, criteria for selecting husbands, etc. The discussions also concerned female teachers' choice of work, academic undertakings, training, physical conditions, family burdens, conditions that produce female professionals, age of retirement and other issues concerning women's policies. A few male teachers were also present in some of the discussions.

Not all published statistical information in China classifies information by sex, even though items like academic degree, age, disciplines and title are included. The absence of statistics classified by sex, which is itself a major problem, results in the absence of some important statistics in the report, such as the discipline distribution of female students and teachers.

Background

Chinese education dates back to as early as 3,000 years ago in the Shang Dynasty. The influential 1,903 book *Bell for Women* depicted the education of women in ancient China thus: "the rights of women are nailed to earth, women education is nowhere to be found; women have obedience but no virtue, cosmetics but no character, knowledge on cooking but no other capabilities, needlework but no education and heavy household burdens but no rights". Higher education in the past was provided by state schools in the capitals of small individual nations (for instance Western Zhou), imperial colleges established in the Han Dynasty, or schools of Confucianism. These schools had no disciplinary sub-divisions or departments as modern universities do and no organic linkage with other schools of a different nature. The participation of women in higher education was virtually non-existent.

Even in the more recent past, the whole of education was extremely under-developed. Eight per cent of the population was illiterate and the enrolment rate of school-age children was very low, and few children of workers and peasants had access to schools. Female participation in education was negligible. A survey conducted in the early 1920s indicated that out of a total of 34,880 students, 887 (2.5 per cent) were female. In the General Introduction on Higher Education compiled by the Ministry of Education in 1928-1929 it was indicated that out of a total of 17,285 university students, 1,485 (8.5 per cent) were female. In the same Year Book, it was indicated that in specialized schools out of a total population of 1,520 students, 111 (7.3 per cent) were female.

As time elapsed, the proportion of girls in secondary and higher education also gradually increased. The statistics for 1928-1931 are presented in Table 2.1.

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Table 2.1 Enrolment figures in higher education
and specialized education: 1928-1931

	<u>Year</u>			
	1928	1929	1930	1931
Higher education				
Total No.	22,786	25,499	33,847	38,977
No. of Females	1,835	2,520	3,526	4,535
% Female	8.05	9.88	10.42	11.64
Specialized education				
Total No.	3,412	3,624	3,719	4,765
No. of Females	170	189	186	588
% Female	4.98	5.22	5.00	11.71

Source: *The First Volume of the Year Book of Chinese Education*, 1934, pp. 20 & 155.

According to available statistics, the total number of female students in higher education in 1932 was recorded as 3,290. In addition, 559 were in specialized schools and 89 girls had gone abroad for studies. An important avenue to women's participation in higher education was to study abroad.

During the Guanxu years of the Qing Dynasty, the objective of women's education was to produce a person who was able "to serve the husband, teach the children, take care of the family and plough the field". Accordingly, there was no need for women to go abroad for education. However, during the 19th and early 20th Centuries, the attraction of advanced foreign educational systems and the influence of foreign culture spurred many Chinese to study abroad and this naturally affected women's education.

1905 saw a group of 20 girls sent by Hunan Province to Japan for an intensive normal education course. Similarly, Fengtian Province, upon the suggestion of Song Xiling who came back from a study visit on Japan's women's education, dispatched girls to study in Japan on an annual base. This was the commencement of Chinese female students going to Japan to study.

In 1907, Jiangsu Province sent ten male students to study at Yale University and Cornell University, and three females embarked on their journey to the American Walsh Girls' College. These three females were the first batch of government-financed female students sent to the United States. In the following year, Zhejiang Province examined candidates for American education. The Ministry of Education conferred to girls the right to government scholarships even though the number was limited. Later, Qinghua University sent ten girls to study abroad every two years. Different quotas on government scholarships for male and female students were set by each province, and due to the traditional discrimination in education, the female quota never managed to reach that of the male. Figures available from Qinghua University help illustrate the situation (Table 2.2).

Table 2.2 Number of students sent abroad
by Qinghua University: 1914-1922

Year	No. of Males	No. of Females	% Female
1914	86	9	10
1915	39	0	-
1916	45	10	22
1917	42	0	-
1918	73	9	12
1919	67	0	-
1920	79	0	-
1921	58	10	17
1922	89	0	-
Total	578	38	6.57

Between 1914 and 1922, Qinghua University sent only 38 females abroad, accounting for 6.57 per cent of the total. The financial support they received accounted for only 2.33 per cent of total expenses. According to the statistics available, all of the students sent by Qinghua University to study in America recorded excellent academic results. Some even won prizes for their performance.

In 1925, it was noted by the "Report on the Status Quo of Chinese Students in America and Future Policies" that America had hosted more than 1,600 Chinese students among whom 640 were females. It is not clear, however, how many of the students received scholarships.

Table 2.3 lists the percentage of men and women in specialized education and above for the years 1934-1947, and illustrates the level of female participation in higher education before the founding of the People's Republic of China (PRC).

Enrolment reached a peak in 1947 with a total of 155,036 students among whom 27,604 were women. In science disciplines, the total enrolment was 59,673 including 7,920 women. In the same year, 79,472 students were in the liberal arts, whereas 15,415 were women. 1941 was recorded to have the highest proportion of female students (19.8 per cent). The reality is self-evident, women had little chance to education before 1949, and most women could not gain access to higher education. In addition, the number of females enrolled in the sciences was quite low.

According to the statistics provided by the Ministry of Education of the Kuomintang (Nationalist) Government (KMT), in 1947 there were altogether 207 institutions of higher education (including short-course ones) in the whole country (Table 2.4). Moreover, in 1946 there were only 5,892 secondary schools with a total enrolment of 1,878,523; and there were 289,000 primary schools with a total enrolment of 23,683,492. Among schools and institutions of various types, quite a number were private and missionary schools, the latter were subsidized by foreign agencies. The geographical distribution of schools was extremely scattered. Most of the higher education institutions and specialized secondary schools were located in large and medium-sized cities and the coastal provinces; the majority of primary

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Table 2.3 Enrolment figures in the specialized secondary schools and above: 1934-1947

Year	Total			Natural Science			Liberal Arts		
	No.	%		No.	%		No.	%	
	Total	Female	Female	Total	Female	Female	Total	Female	Female
1934	41,768	6,272	15.02	15,698	1,634	10.43	26,042	4,632	17.79
1935	41,128	6,378	15.51	19,990	1,849	9.25	24,082	4,516	18.75
1936	41,922	6,375	15.21	17,459	2,014	11.54	23,152	4,241	18.32
1937	31,188	5,352	17.16	15,414	2,065	13.40	15,562	3,237	20.80
1938	36,180	6,648	18.37	18,003	2,746	15.25	16,716	3,652	21.85
1939	44,422	7,834	17.64	22,645	3,046	13.45	19,809	4,360	22.01
1940	56,376	10,200	19.47	25,262	3,572	14.14	24,897	6,072	24.39
1941	59,457	11,774	19.80	28,006	4,265	15.20	28,096	6,547	23.30
1942	64,097	12,273	19.15	29,127	4,434	15.22	29,601	6,208	20.97
1943	73,669	13,701	18.60	31,994	4,740	14.82	35,299	7,126	20.19
1944	78,909	14,843	18.81	33,609	5,097	15.17	37,442	7,556	20.18
1945	83,498	15,861	19.00	34,353	5,594	16.28	40,085	7,778	19.40
1946	129,336	23,645	18.28	54,296	7,472	13.76	60,542	12,375	20.44
1947	155,036	27,604	17.80	59,673	7,920	13.27	79,472	15,415	19.40

Source: *2nd Year Book of the Chinese Education*

and secondary schools were located in cities and towns, with very few in the countryside. Education was even more backward in the hinterland and outlying provinces and regions and in the areas inhabited by the national minorities. Only 5.6 per cent of the total population was enrolled in schools of various types and levels. During the 36 years before liberation when the KMT held power, altogether only 210,000 people graduated from colleges and universities. And the fields of study hardly met the needs of the nation.

Following the creation of the People's Republic of China in 1949, the old educational system was subject to radical reform under the leadership of the Chinese Communist Party (CCP) and the people's government. Education at various levels and of different types made rapid progress. In comparison with the highest level reached during pre-liberation days (for higher education it was 1947 and for primary and secondary education it was 1946) by 1983 the total enrolment at the tertiary, secondary and primary levels increased respectively by 7.8, 24.7 and 5.7 fold (see Table 2.4). The net enrolment ratio of primary school-age children has reached 94 per cent and the percentage of illiterates among the population above 12 years of age has been reduced to about 30 per cent. It was on a very weak and under-developed infrastructure inherited from the past that the new educational system has been built.

The development of higher education was slowed somewhat during the "Cultural Revolution" of the late 1960s and early 1970s. But since 1979, higher education has made considerable headway. In 1983 the number of full-time higher educational institutions reached 805, an addition of 207 institutions since 1978.

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Table 2.4 Number of Chinese higher education institutions
and enrolment figures: 1947-1983

Year	Higher Education		Secondary and Primary Education	
	No. of reg. higher ed. institution	No. higher ed. enrolment	No. secondary ed. enrolment*	No. primary ed. enrolment*
1946	-	-	1879.0	23683.0
1947	207	155,036	-	-
1949	205	116,504	1268.0	24391.0
1950	193	137,470	1566.0	28924.0
1951	206	153,402	1964.0	43154.0
1952	201	191,147	3145.0	51100.0
1953	181	212,181	3629.0	51664.0
1954	188	252,978	4246.0	51218.0
1955	194	287,653	4473.0	53126.0
1956	227	403,176	6009.0	63466.0
1957	229	441,181	7081.0	64283.0
1958	791	659,627	11998.0	86403.0
1959	841	811,947	12903.0	91179.0
1960	-	961,623	14873.0	93791.0
1961	845	947,166	10344.0	75786.0
1962	610	829,699	8335.0	69239.0
1963	407	750,118	8376.0	71575.0
1964	419	685,314	10195.0	92945.0
1965	434	674,436	14318.0	116209.0
1966	434	533,766	12968.0	103417.0
1967	434	408,930	12545.0	102443.0
1968	434	258,736	14051.0	100363.0
1969	434	108,617	20253.0	100668.0
1970	434	47,815	26483.0	105280.0
1971	328	83,400	31494.0	112112.0
1972	331	193,719	36167.0	125492.0
1973	345	313,645	34947.0	135704.0
1974	378	429,981	37137.0	144814.0
1975	387	500,993	45368.0	150941.0
1976	392	564,715	59055.0	150055.0
1977	404	625,319	68488.0	146176.0
1978	598	856,322	66372.0	146240.0
1979	633	1,019,950	60249.0	146629.0
1980	675	1,143,712	56778.0	14627.00
1981	704	1,279,472	50146.0	143323.0
1982	715	1,153,954	47028.0	139720.0
1983	805	1,206,823	46347.0	135780.0

*Figures in 1,000s

Participation of women in higher education in China

The total enrolment of college students (including those enrolled in short-course programmes) reached 1,207,000, an increase of 41 per cent in comparison with 1978 figures. At the same time, there was an increase in the number of students admitted to the following fields of study: finance and economics, political sciences and law, management and liberal arts.

The post-graduate programmes were also developed. In 1983, the total enrolment of post-graduates in both universities and research institutes reached 37,100, an unprecedented development (Table 2.5).

Table 2.5 Number of institutions training post-graduate students
and number of post-graduate enrolment

Year	Total	Reg. Inst. of Higher Education	Chinese Academy of Science	Chinese Academy of Soc. Sc.	Ministries and Com. under State Council	Research Organ. under Provinces and Municipalities
Institutions						
1962	173	114	49	10	-	-
1963	190	121	60	-	9	-
1964	219	129	76	-	14	-
1965	234	134	81	-	19	-
1978	370	208	73	18	71	-
1979	508	300	84	20	79	25
1980	586	316	89	21	102	58
1981	593	338	98	1	101	55
1982	633	330	111	1	134	57
1983	680	345	115	1	162	57
Students						
1962	6130	5771	382	37	-	-
1963	4938	4309	583	-	46	-
1964	4881	3973	819	-	89	-
1965	4546	3528	943	-	75	-
1978	10934	8396	1381	405	752	-
1979	18830	15539	1307	557	1253	174
1980	21604	17728	1393	594	1577	312
1981	18848	15575	1158	321	1467	327
1982	25847	21284	2089	259	1924	291
1983	37166	30571	3025	425	2788	357

Women's participation in higher education

The awarding of doctoral degrees in China began in 1981. By the end of 1983, 29 doctoral degrees and 18,143 masters degrees had been awarded (Table 2.6).

Table 2.6 Number of Doctors and Masters Degrees Awarded: 1981-1985

Degree	Year				
	1981	1982	1983	1984	1985
Doctorates *	-	13	16	92	236
Masters	8665	5773	3548	7789	12618

In 1984, there were 902 full-time higher institutions, of which 547 were universities and colleges, 272 specialized colleges and 82 short-term vocational colleges. In 1984 there were 1,157 adult higher institutions of various types and there were correspondence programmes and evening courses within 456 full-time universities.

Along with the rapid development of higher education, attention was paid to rationalizing the fields of study in order to meet the needs of national development. Efforts were made to enrol more students in fields like liberal arts, finance and economics, management, political science and law and some engineering programmes which can train personnel within a short period of time.

In 1984, there were 696 programmes which offered post-graduate education: 358 were in universities and 338 were in research institutes. In the whole country, 196 programmes, with the approval of the State Council, could award doctoral degrees and 425 programmes could award masters degrees. By the end of 1984, 87 candidates had been granted doctoral degrees and 26,000 masters degrees, almost 110 times the number of total degrees awarded pre-1949. Up till 1984 altogether 8,032 students had been sent abroad to study.

Along with the development of education at all levels, the people's government has created the necessary conditions for women to attend regular courses. In 1983, of all the primary pupils girls made up 43.7 per cent. Among middle school boys and girls, girls made up 39.2 per cent. In all specialized secondary schools, 34.6 per cent of the total students were girls. In institutions of higher learning, female students made up 26.2 per cent of the total (Table 2.7).

Participation of women in higher education in China

Table 2.7 Female students as a percentage of total enrolment by level and type of institutions: 1947-1983

Year	Reg. Inst. of Higher Education	Secondary Technical Schools	Teacher Training Schools	General Secondary Schools	Ag. & Voc. Schools	Primary Schools
1947	17.8	-	-	-	-	-
1949	19.8	-	-	-	-	-
1950	21.2	-	-	26.5	-	-
1951	22.5	31.9	26.0	25.6	-	28.0
1952	23.4	26.0	24.0	23.5	-	32.9
1953	25.3	26.0	25.8	24.4	-	34.5
1954	26.3	25.4	26.6	25.0	-	33.3
1955	25.9	24.7	27.1	26.9	-	33.4
1956	24.6	25.2	29.1	29.3	-	35.2
1957	23.3	25.4	28.4	30.8	-	34.5
1958	23.3	25.4	31.5	31.3	-	38.5
1959	22.6	27.3	36.7	31.2	-	39.1
1960	24.5	31.3	31.3	31.2	-	39.1
1961	24.7	35.8	43.7	32.2	-	27.5
1962	25.3	39.7	48.8	34.1	-	34.8
1963	25.8	39.5	47.2	34.0	25.0	-
1964	25.7	32.7	47.6	34.1	24.4	35.0
1965	26.9	37.9	48.6	32.2	23.6	39.3
1973	30.8	-	-	33.0	-	40.7
1974	33.8	38.0	38.3	38.1	-	43.7
1975	32.6	34.4	34.4	39.3	-	45.2
1976	33.0	35.5	35.5	40.4	-	45.5
1977	29.0	35.0	35.0	41.7	-	45.4
1978	24.1	35.3	29.8	41.5	-	44.9
1979	24.1	34.8	25.9	40.8	-	44.9
1980	23.4	37.2	26.0	39.6	32.7	44.6
1981	24.4	36.0	28.8	39.0	40.2	44.0
1982	26.5	35.2	33.9	39.3	38.7	43.7
1983	26.9	35.0	37.2	39.5	39.0	43.7

Women's participation in higher education

The number of female post-graduate students has also been increasing; the number of female enrolment at this level increased from a low of 518 students in 1965 to 16,216 in 1985. The participation of females at the post-graduate level is discussed in more detail below.

Compared to the participation rates that pertained in the pre-liberation era, in 1984 the percentage of females enrolled in universities, middle schools and primary schools rose by 10.8 per cent, 19.5 per cent and 18.3 per cent respectively. Currently, about 11,900,000 female students study in various schools (Table 2.8). Women, rural and urban, actively attend the courses in adult schools. Many women have attained higher educational levels by way of self-study. In the schools and training programmes for the staff of various enterprises, female staff members make up about one third of the participants. In rural areas women also take part in training programmes. Obviously, intellectual and cultural opportunities for Chinese women have improved.

Table 2.8 Number of female students by level
and type of institution (figures in 1,000s)

Type of Institution	1980	1981	1982	Year 1983	1984	1985
Postgraduate	2.6	2.7	3.6	5.3	9.2	14.4
Reg. inst. of higher education	268.1	312.1	305.4	321.9	399.8	510.6
Secondary sch.	22340.8	19500.7	18406.8	18237.6	19440.2	20492.6
Specialized sec. school	391.7	353.7	360.2	410.1	510.3	607.0
Sec. tech. sch.	266.5	227.8	220.8	240.7	301.5	387.7
Teacher training school	125.2	125.9	139.4	169.4	208.8	219.3
General sec. school	21800.8	18953.7	17774.4	17351.1	18218.7	18931.1
Ag. & voc. school	148.3	193.3	272.2	476.3	711.2	954.3
Primary sch.	65174.0	63012.0	60999.0	59372.0	59377.0	59862.2

Participation of women in higher education in China

Analysis of the progress of women's participation in the higher education systems of China

Student participation

Undergraduate: The figures in Table 2.9 illustrate the changing and improving pattern of female participation in Chinese higher education.

Table 2.9 Female participation in undergraduate programmes: 1947-1985

Year	No. of Female Students	% of Total Enrolment
1947*	27,604	17.8
1950	29,411	21.2
1955	75,755	25.9
1960	235,598	24.5
1965	181,281	26.88
**	**	**
1977	181,623	29.04
1980	268,137	23.44
1983	324,926	26.92
1985	510,586	29.98

*The largest number of students on campus pre-1949

In the country as a whole, the percentage of female students as a proportion of the total number of students has constantly increased. First, female students as a percentage of the total compared with that of 1947, increased by 3.4 per cent in the early years (from 17.8 per cent in 1947 to 21.2 per cent in 1950). The number of female students in 1985 was 18.5 times that of 1947. Second, since 1949, the proportion of female students has constantly risen, from 21.2 per cent in 1950 to 23.44 per cent in 1980. The figure went up to 29.98 per cent in 1985. The number of female students in 1985 was about 18 times that of 1950.

Post-graduate: Prior to 1949, China trained very few post-graduate students, masters degrees were scarce and not a single Ph.D. was awarded. Between 1949 and 1965 the number of post-graduate students remained small. In 1984 the number of on-campus post-graduates students was 57,566, a figure three times that of 1981 (18,848). Among them, 1,243 were working on Ph.D.s and 56,323 on masters degrees. They were enrolled in the following disciplines:

Women's participation in higher education

Philosophy	1,000
Economics	2,725
Law	2,124
Education	617
Literature	2,645
History	1,413
Sciences	13,170
Engineering	24,894
Agriculture	3,370
Medicine	5,608

And attended the following different types of institutions:

Regular Universities	49,949
The Chinese Academy of Sciences	4,249
The Chinese Academy of Social Sciences	666
Institutions under the Ministries & Commissions of the State Council	4,132
Institutions in Provinces, Autonomous Regions & Municipalities	570

In 1947, there were only 424 on-campus post-graduate students, of whom very few were female students. Since the founding of the PRC the number of female post-graduate students has grown rapidly (Table 2.10).

According to 1985 figures, there were 264 female candidates studying for Ph.D. degrees, accounting for 8.8 per cent of the total.

Over the last three decades, the number of female on campus post-graduates has constantly increased as has their percentage of the total. But, on the whole, the number of female post-graduates is not large nor is their proportion of the total, which has yet to reach one-fifth.

Table 2.10 Gender distribution of post-graduate students: 1963-1985

Year	Total No. of Postgraduates	No. of Female Postgraduates	% Female
1963	4,938	790	16.00
1964	4,881	641	13.13
1965	4,546	518	11.39
1978	10,934	828	9.86
1980	21,604	2,553	11.82
1981	18,848	2,695	14.30
1982	25,847	3,550	13.73
1983	37,166	5,314	14.30
1984	57,566	9,238	16.05
1985	87,331	16,216	18.57

Source: *Achievement of Education in China: Statistics, 1949-1983, 1980-1985*

Participation of women in higher education in China

Regional enrolment pattern

Due to the fact that China is a large country with an enormous population, naturally, there is uneven development among various areas and provinces. The figures in Table 2.11 from some of the provinces illustrate the point.

Table 2.11 Higher education enrolment figures in selected provinces

Area	Year					
	1947	1950	1960	1970	1980	1985
Beijing	17,442	17,224	127,567	9,064	83,032	122,791
Tianjin	*	*	*	379	29,906	45,328
Shanghai	30,798	23,351	63,533	4,010	73,370	107,865
Hebei	4,952	6,042	53,772	5,035	41,452	58,244
Heilongjiang	*	6,042	35,772	300	43,627	65,940
Zhejiang	4,594	3,260	29,013	3,014	37,592	52,688
Hubei	5,633	6,094	52,738	1,746	65,296	111,054
Guangdong	14,880	8,437	44,524	6,863	44,053	74,285
Sichuan	18,843	14,962	69,850	419	74,742	112,836
Xinjiang	140	323	6,232	162	14,242	26,414

*figures not available

Source: *Achievement of Education in China: Statistics, 1949-1983, 1980-1985*

Academic performance

In general, female college students are hard-working and their scholastic records are about the same as or better than that of male students. For example, the statistics provided by East China Normal University show that, in 1982, of the students in five departments of natural sciences, the female students on average had better scholastic results than the male students and that there were more 'excellent' female students (Table 2.12).

Table 2.12 Scholastic records of male and female graduates in five departments in East China Normal University: 1982

	Grade							
	Excellent (%)		Good (%)		Average (%)		Pass (%)	
	M	F	M	F	M	F	M	F
Total	52.1	69.7	23.6	21.2	17.4	7.7	6.1	1.4
Math.	59.4	87.1	17.7	9.7	20.8	3.2	2.1	-
Physics	50.0	69.6	17.7	17.4	9.7	8.7	22.6	4.3
Chemistry	60.0	61.5	22.2	25.5	15.6	10.3	2.2	2.6
Biology	43.8	57.9	53.1	42.1	3.1	-	-	-
Geography	41.5	61.2	24.4	19.4	34.1	19.4	-	-

Women's participation in higher education

The data from Zhejiang Medical University shows that among the students in 1982-1984, on average, the scores of the female students were either the same or better than their male colleagues (Table 2.13).

Table 2.13 Scholastic records of male and female students
in Zhejiang Medical University: 1982-1984

	Av. Score in 1st year (100-point system)	Av. Score in 2nd year (100-point system)	Av. Score in 3rd year (100-point system)
Male	59.6	80.7	83.4
Female	63.3	82.2	83.4

In Beijing Chemistry Engineering College during 1980-1984 there were altogether 13 model students, of whom six were females. During 1983-1984 among the six students who obtained college scholarships, First Grade, there were three female students. Of those students who gained access to post-graduate training, one-half were female.

Teachers comment that the majority of the female students study hard and get good results, but they have a narrower scope of knowledge and they do not have as good practical abilities as males. While male students have a wider range of knowledge and have better practical ability, they do not study hard enough. In terms of scores, the best and the poorest are all among the males.

Teachers/researchers

The number of university teaching staff is not evenly distributed across the fields of study. The fields of study with the largest number of teaching staff, in descending order, are: engineering, natural sciences, humanities, and medicine and pharmacy (Table 2.14).

Participation of women in higher education in China

Table 2.14 Number of full-time university teachers
by field of study: 1980-1985

Field	Year					
	1980	1981	1982	1983	1984	1985
Engineering	70,028	69,753	82,108	85,070	86,818	96,046
Agriculture	12,422	12,261	13,843	14,406	15,368	16,306
Forestry	2,233	2,184	2,688	2,704	2,434	2,704
Medicine & pharmacy	24,473	24,321	25,058	27,835	28,394	29,184
Teacher training	1,541	1,748	2,025	2,327	2,583	3,003
Humanities	51,007	52,011	61,508	65,613	68,694	75,228
Natural sc.	58,985	59,183	70,383	72,535	74,270	79,613
Finance & economics	4,280	4,951	6,645	8,084	10,237	12,914
Political sc. & law	802	1,077	1,675	2,213	2,766	4,027
Physical culture	10,976	11,429	14,042	14,864	15,846	17,216
Art	5,503	5,687	6,933	7,268	7,611	8,021
Other	4,612	4,671	-	-	-	-
Total	246,862	249,876	286,908	302,919	315,021	344,262

The number of female university teachers and their proportion of total university teaching staff is presented in Table 2.15.

Table 2.15 Gender distribution of university teaching staff: 1950-1985

Year	Total Staff	No. Female	% Female
1950	17,319	1,902	10.98
1955	42,066	7,596	18.06
1960	139,142	28,942	20.80
1965	138,116	28,425	20.58
1975	155,723	37,988	24.39
1980	246,862	62,469	25.31
1981	249,876	64,455	25.79
1982	286,908	73,826	25.73
1983	302,919	78,324	25.86
1984	315,021	82,509	26.19
1985	344,262	91,879	26.69

Source: *Achievement of Education in China: Statistics, 1949-1983, 1980-1985*

Women's participation in higher education

In the early 1950s, female university teaching staff made up about 11 per cent of the total number of teaching staff. But in 1985, the figure reached 26.69 per cent of the total. According to the figures provided by the State, in 1985, there were 344,262 full-time teachers in regular universities, of whom 91,879 were women. The percentage distribution of male/female teaching staff generally conforms to that of male/female students.

Table 2.16 Distribution of university teaching staff
by academic rank: 1980-1985

Year	Professor		Associate Professor		Lecturer		Instructor		Assistant	
	No.	%	No.	%	No.	%	No.	%	No.	%
1980	3,620	1.5	12,971	5.3	111,698	45.2	52,563	21.3	66,010	26.7
1981	4,231	1.7	19,680	7.9	118,275	47.3	46,276	18.5	61,414	24.6
1982	4,458	1.5	22,461	7.8	128,706	44.9	37,764	13.2	93,519	32.6
1983	4,427	1.5	29,058	9.6	137,631	45.4	28,334	9.3	103,469	34.2
1984	4,452	1.4	28,217	8.9	136,669	43.4	31,748	10.1	113,935	36.2
1985	4,674	1.4	28,606	8.3	136,760	39.7	39,111	11.4	135,111	39.2

With regard to academic rank, the Chinese university teaching profession has a pyramidal structure (Table 2.16). In 1985, out of the total of 344,262 university teachers, only 4,674 (1.4 per cent) held the rank of professor. In the same year, there were 135,111 assistant teachers (39.2 per cent of the total), 39,111 instructors (11.4 per cent), 136,760 lecturers (39.7 per cent), and 28,606 associate professors (8.3 per cent).

The gender distribution of university teachers by academic rank for 1985 is presented in Table 2.17. Ninety-four per cent of all professors are male, and about 86 per cent of all associate professors are male. In terms of the proportional distribution of teachers across rank, about the same percentage of males and females hold the position of lecturer. However, in comparison to their male colleagues, female teachers above the position of lecturer are under-represented and below this position they are over-represented. It is also important to note that out of 1,174 Ph.D. tutors, 42 were female (3.6 per cent) and out of 27,146 MA tutors, 2,301 were female (8.5 per cent).

Table 2.17 Gender distribution of university teachers
by academic rank: 1985

Rank	Distribution Within Academic Rank					Distribution Across Academic Rank			
	Total No.	Male		Female		Male		Female	
		No.	%	No.	%	No.	%	No.	%
Prof.	4,674	4,392	94.0	282	6.0	4,392	1.7	282	0.003
Ass.									
Prof.	28,606	24,621	86.1	3,985	13.9	24,621	9.8	3,985	4.4
Lect.	136,760	100,788	73.7	35,972	26.3	100,788	39.9	35,972	39.2
Inst.	39,111	27,508	70.3	11,603	29.7	27,508	10.9	11,603	12.6
Assis- tant	135,111	95,074	70.4	40,037	29.6	95,074	37.7	40,037	43.6
Total	344,262					252,383	100.0	91,879	100.0

Incentives and opportunities

According to information provided by the State Statistics Bureau, in 1984 the income of female university graduates of the 1960s and 1970s is apparently below the average income of urban residents (the annual average income of urban residents is about 608 yuan). Low academic rank and having few opportunities to attend international seminars or symposiums have lead to the low social and economic status of female academics. A sample survey conducted in Sichuan Province indicated that 61 per cent of the 599 female university teachers interviewed never published any research papers, 66 per cent of them never attended any academic conferences, and 58 per cent never had the opportunity to attend training programmes. Out of the 400 members of the academic board of the Chinese Science Academy, 125 are university professors, of whom only five are females. Among the 160 deputies from the educational circle for the National Political Consultative Conference, only ten females are involved in higher education and research.

Administrators/policy-makers

Most women in institutions of higher learning are lecturers, assistants or low-ranked administrators. The survey conducted for this study demonstrated that very few women are involved in high level decision-making in institutions of higher learning. In Beijing Normal University, for example, all the high ranking administrators (President, Vice-President, Dean of Studies, Head of General Service Department, etc.), except for a deputy secretary, are men.

Identification and analysis of socio-cultural factors affecting women's participation in higher education

At the moment, women intellectuals in China are treated primarily as equals with men in terms of payment and work. But some problems and difficulties remain to be solved.

Higher education is primarily confined to men and only a small proportion of female students have access to higher education. Female students from rural areas are even more disadvantaged. The participation of female students as a proportion of total enrolment was as follows: 23.44 per cent in 1980, 24.42 per cent in 1981, 26.46 per cent in 1982, 26.92 per cent in 1983, 28.56 per cent in 1984, and 29.98 per cent in 1985. The proportion of female enrolment has never reached one-third of the total. Females are in an even weaker position in relation to graduation rates. The percentage of graduates between 1980 and 1985 who were female was: 11.8 per cent in 1980, 14.3 per cent in 1981, 13.79 per cent in 1982, 14.3 per cent in 1983, 16.09 per cent in 1984, and 18.67 per cent in 1985. The proportion of female graduates has yet to reach one-fifth of graduates as a whole.

Population statistics show little difference between the male and female population eligible for higher education. But a much larger number of male students are admitted into universities than female students. Females from rural areas are particularly disadvantaged. According to the statistics from Hunan Agriculture University, only 31 per cent of the 366 female students recruited during the period 1977 to 1982 were from rural areas, the other 69 per cent were all from cities. As the statistics of the Normal University of Northeast China show, while 79 per cent of the 248 female students recruited in six science subjects in 1986 were from urban backgrounds, only 21 per cent of them were from rural areas, and of these students, only 8.1 per cent were born into families in which both the father and mother were farmers.

There are a number of factors that hinder the full participation of women in higher education, many of which have their roots in history.

Socio-cultural

Tradition. As mentioned above, Chinese education dates back to as early as 3,000 years ago in the Shang Dynasty. That period of history, however, was based on principles of male superiority. Women, whose activities were confined to the home, did not participate in economic, political and cultural activities as equals to men. They did not enjoy access to education. One of the basic principles of female education in ancient China was "women's virtue lies in her ignorance".

The idea that "man is superior to woman" originated in the Western Zhou Dynasty, it took further shape in the Han Dynasty and Tang Dynasty and reached its extreme expression during the Song Dynasty. The "theoretical basis" for such a concept was the "distinction between man and woman", which referred to the so-called "different makings of men and women by the heavens". By the same 'theory', man and woman were supposed to have different characteristics thus

"man is heaven, woman is earth". Heaven is yang (the masculine or positive principle in nature) and earth is yin (the feminine or negative principle in nature); the former is strength and the latter is grace. Accordingly, women's moral excellence was earmarked by docility and gentleness. The theory that "man is superior to woman" helped preserve the rigidly stratified feudal social system of ancient China.

The objective of women's education in ancient times was to train "docile wives and virtuous mothers" with three 'obeys' for females: "obey the father, obey the husband, and obey the son on the death of the husband". Women were required to be faithful, docile and respectful to husbands; filial to parents-in-law; hardworking and thrifty, at the same time taking care of children; quiet and reticent; careful in choice of words; graceful but not frivolous; industrious and enduring. Women's education was based on the normative rules of feudal society.

Women's education occurred through royal court education, family education, school education and social education. The education of royal girls and maids of honour emphasized court etiquette and maid service. In the family, mothers, senior females or family teachers discharged the responsibility of education. Girls were taught to spin, weave, sew, embroider, make shoes and needlework. They also were instructed in sacrifice rites, cooking, household work and some other productive skills. At the same time the feudal ethical code was inculcated into their minds and in return they were wittingly obedient to husbands, hence sub-consciously upholding the feudal system in which men were dominant. Family education was conducted in various forms. Private tutors were employed or parents and relatives were in charge of teaching, in some cases, eminent scholars came to give lectures. School education for girls was never adequately developed.

In the past, teaching materials for women came in many forms. Not only were books of poetry and histories available but also there were other materials specially prepared for women. As early as the Han Dynasty, teaching materials were being prepared, mainly as a result of teacher initiatives. In addition to these materials, the imperial court, government, and even the emperors themselves personally compiled textbooks for women. For instance, Empress Zhangsong, wife of Emperor Tang Taizong, wrote a book entitled *Household Doctrines*. From the Ming and Qing Dynasties onwards, the Emperor entrusted a team of scholars to work on girls' teaching materials to be approved by the Emperor and distributed throughout the country. The most influential books for women's education were *The Book of Rites and Interior Rules*, *Biographies of Great Women*, *Commandment for Women*, *The Four Books for Women*, *Rules for Girls*, *Rules and Regulations for Women's Behaviour* and *Women's Studies*.

The effects of feudal thinking can still be felt in China. Such ideas as "man is superior to woman", "a woman without talents makes a good one", "husband is the bread-earner and wife takes care of the family" continue to find their places in society. Traditional ideas are particularly obvious in some rural areas where females are asked to learn a few words, do needlework and household chores, and be a good wife and mother. Some parents even argue that since females will be married off sooner or later, it is not worthwhile to invest money in their education.

Women's participation in higher education

In 1985, the enrolment rate for school-age females, which registered 93.5 per cent, stayed below that of school-age children, which is some 95.95 per cent.

Women's participation in higher education has been an important component of the democratic revolution. But whenever there was a call to return to the values of the past, women's rights suffered. For example, in 1912 when Yuan Shikai usurped power, he advocated the restoration of the feudal system and banned males and females from studying in the same school. The feudal system in China with a history of several thousand years has remained highly influential, particularly with regard to the social tradition that never formally recognized women's rights to school education, not to mention higher education.

Family responsibilities. Professional women shoulder heavy family responsibilities. In order to obtain qualifications and commence careers, marriage is often delayed. According to estimates, less than 15 per cent of professional women enter into marriage before 23 years of age, and about 40 per cent marry between the ages of 23 and 30 years old. With regard to females who graduated from university in the 1970s, 64 per cent delayed marriage until between the ages of 27 and 30 years old. Late marriage produces several problems for female intellectuals, especially those aged from 27 years to 50 years. While they take up the responsibility of caring for the elderly and young children, their professional workload is just as heavy as that of their male counterparts. According to the survey, female intellectuals spend an average of four hours each day on household chores. As a result of combining family responsibilities with those of career, females find it extremely difficult to advance in their academic careers and fully contribute to the development of society and the nation.

Because of the nature of institutions of higher education, female teachers, scientific research fellows and administrators do not work "nine to five"; they continue to work and study in their spare time. In general, housework is shared between husband and wife, and as our survey indicated, 90 per cent of the husbands in one way or another share the housework with their academic wives. But the reality is that the bulk of household chores is done by the wife. In many 'dual academic' families, both husband and wife have heavy workloads and life is tense and disorderly. The competing demands of family and work cause one or the other activity to suffer. Not a few women have given up careers for the sake of the family. It is difficult to be both successful in a career and to take care of the family in China, as the country has limited social services and domestic support external to the home.

Female academics hold advanced qualifications and the idea that "men and women are equal" is by no means new to them. At the same time, however, traditional ideas persist. Along with the advocacy of equality between men and women goes the traditional idea that "men and women are somehow different" and that "men and women are not completely equal". This gives rise to contradictory and complicated psychological responses. On the one hand, women maintain that they should make contributions to society and career equal to those of men. Some women demonstrate incredible will-power in fulfilling their life ambitions. On the

other hand, women tend to blame themselves for family problems and worry about failing to be a good mother and wife. These contradictory feelings hamper many women in terms of career advancement, and some simply give up. Quite a number of female professionals, characterized by a lack of self-confidence and independence, adopt a passive and fatalistic manner under the pressure of conflicting societal and familial demands. More than a few professional women give up their careers in order to maintain the balance and stability of the family. About 7 per cent of the women interviewed were not ambitious and lacked self-confidence and self-respect, and placed low expectation on themselves. Some female professionals are quite ambitious before marriage and are eager to succeed. But upon marriage, things change. In that raising children and fulfilling family duties take up so much of their time and attention, their enthusiasm for work and career gradually recedes. They cease to place high expectations upon themselves and sacrifice their careers for the sake of their husbands and the future of their children.

Politico-economic

Political factors. In terms of modern political history, Chinese women's emancipation and the beginning of their participation in higher education are commensurate with the foreign political influence on Chinese society that began to gain momentum in the 19th Century. The results of foreign influence, however, were not uniform in terms of transforming traditional values and structures. The effects of the 'Opium War' of 1840 on Chinese society and education were, for example, mixed. On the one hand, various kinds of schools imitating western values were established; on the other hand, schools retained much of their feudal character.

The *sine qua non* of women's participation in higher education should be their complete political and economic independence. However, before 1949 only bourgeois families had access to higher education. The statistics in 1932 indicated that the female illiteracy rates were as high as 80 per cent, whereas only 20 per cent of the school-aged girls could enter primary education. Going to university or going abroad to study was a privilege for a few elite women. Even among the women who had received higher education, many had been trained to be a new type of "docile wife and good mother" who took care of husband and children, and were confined at home. The few female graduates who wished to be involved in productive activities faced various problems. Many governmental departments, for example, openly announced that married women would not be employed and the recruitment of female functionaries was rigidly restricted. Employed women were confined to professions like secretary, primary school teacher and typist. These jobs were time and energy consuming and lowly paid. In some missionary universities, it was ruled that if both man and wife were teachers in the same school, the woman could only receive half pay.

The first group of specialized schools was set up by activists of the Westernization Movement, for instance, Beijing Educational Centre in 1862, Shanghai Dialect

School in 1863 and Tianjing Wubei School in 1868. Beijing Normal College, established in 1894, heralded the commencement of China's contemporary higher education. The "Approved College Statue", publicized in 1904, provided that higher education would be undertaken in three stages: senior middle school (three years), specialized college (four years) and Tongru Yuan – university (five years). The education policy was "teach Chinese literature as the main course, supplemented by western culture". However, in its early years of development, women did not have access to higher education.

Most of the foreign missionaries in addition to their religious activities ran missionary schools, including a few girls' schools. The first girls' school was opened in 1844 by British missionaries in Ningpo. The prime task of such schools was to train Chinese girls to become key members of the church, at the same time to prepare them to be obedient wives for Chinese clergymen. For instance, the Saint Mary Girls' School in Shanghai specified that all the students "should only marry Christians".

Public education for girls was officially sanctioned by government only in 1905 when the "Approved School Statue" was enacted. In 1907, the Department of Education submitted 39 statutes on girls' normal education, and 26 statutes on girls' primary education to the Emperor for approval.

From about the mid-19th Century onwards, women's emancipation and the struggle for equal political and economic rights, as well as the right to education, became an integral part of a broader socio-political process. In the period 1851-1864, women's education was highly influenced by the Taiping Heavenly Kingdom's peasant revolution, which led to the new imperial examination system stipulating that women and men enjoy equal opportunity in the test and recruitment for official office. The Heavenly Kingdom upheld that all labouring women and children "have access to clothes, food and education". Girls' schools were set up so that men and women could enjoy equal educational opportunities. Many women had become valiant soldiers or teachers respected by the people.

In the last years of the Qing Dynasty "the Constitutional Reform and Modernization" initiated by Kang Yuowei and Liang Qichao raised the question of women's education. It was recognized that only through women's education that enabled women to acquire knowledge and skills and attain economic independence, could the lot of all the people improve. Liang Qichao, in his "On Women's Education" pointed out that "any Chinese, no matter whether a man or a woman can learn a profession, there is no difference in their competence or incompetence, thus male education and female education should be developed hand in hand". Under the influence of 'Constitutional Reform', in 1889, Li Run (wife of Tan Citong) and Huang Jinyu (wife of Kang Guangren) set up the first girls' school run by the Chinese in Tuiyell near Shanghai. Meanwhile, Jiang Laifang had set up Langling Girls' School in Suzhou.

Jingzheng Girls' School, another early Chinese-run girls' school, was established by Jing Yuanshan in Shanghai in May 1898. The school was open to 8-15 year old girls. The curriculum was divided into Chinese and western subjects. Western

subjects were taught to supplement the Chinese course, and included English, mathematics, geography and medicine. When the 'Reform Movement' failed, Jingzhen Girls' School was ordered to close.

Under the pressure of circumstances, the Qing government by the end of the 19th Century had to incorporate women's education into the system of family education. Until 1906, women's education was officially placed under the auspices of the Department of Education. In the same year, private girls' schools were established. In 1909 the number of public schools reached 722 and the number of girls enrolled was as high as 26,465. Nevertheless, equality of men and women in education was far from being achieved. Great gaps existed between male and female schools in terms of resources as well as in terms of access to careers by graduates. However, it should be noted that, though a failure, the 'Reform Movement' gave great impetus to the development of women's education.

In the Revolution of 1911 (Chinese Bourgeois Democratic Revolution), Dr. Sun Yat-Sen actively advocated equality between men and women, believing that women's education should be oriented to enhancing women's knowledge and to developing women's rights.

The "Patriotic Girls' School" was opened in 1902 by Cai Yuanpai and Jiang Guangyun. These two eminent cultural figures were the President of the school. The school offered mathematics, physics and chemistry, whereas literature and history courses concentrated on the history of the French Revolution. The school was a secret liaison station which trained many revolutionaries for the 'Revolution of 1911'. However, in 1907 the school was disassociated from the underground revolutionary organization. It became an ordinary girls' school.

The 'May Fourth Movement' marked a profound transitional period for China in terms of culture, education and politics. Education and culture underwent a great change. The women's emancipation movement reached a new stage of development in the struggle for political and economic equality with men. Women longed to receive higher education and be equal to men in the universities.

Before the 'Movement', Chinese women only had access to a few missionary universities, namely Beijing Concord Women's University, Nanjing Jinling Women's University and Fuzhou South China Women's College. The Concord University, established in 1904, was later integrated with Yanjing University (Beijing University); Nanjing Jinling Women's University was founded in 1913 and its graduates were awarded B.A. degrees by New York University, while South China Women's College was set up in 1914.

Beijing Normal Girls' School was established in 1917, which opened a class for Chinese education, and in the following year a class for handicrafts and painting. It was not until the 23rd April, 1919 that the Ministry of Education ordered the school to change to Beijing Normal Girls' College. The College was the sole government-run institution of higher learning for women before the 'May Fourth Movement' in China. According to 1920 statistics, the college had an enrolment of 236 students with ten departments: educational philosophy, Chinese, western literature,

history, physical instruction, physics and chemistry, zoology and geology, physical education and music.

Following the 'May Fourth Movement', women were given the right to attend the same higher education institutions as men. Cai Yuanpei, a democratic educator, was the first ever to lift the ban that prevented women from attending the same university as men.

After the 'Revolution of 1911', Cai Yuanpei was appointed the first Minister of Education in the Republic government. The education system was shaped under his sponsorship (called the 'Rensi Kulchou System'). The system provided that in primary education, boys and girls could be mixed, and individual schools for girls were opened at secondary level (normal and vocational). Cai attached great importance to women's education, believing that educated women would lead to true equality and the establishment of a prosperous nation. In the early days of the '1911 Revolution', Cai was actively involved in women's education. In the capacity of the President of Beijing University, Cai Yuanpei admitted the first group of nine girls in 1919. Soon after (1920), Beijing University officially accepted female students. Later, all the universities opened their doors to women.

It should be noted that war and various civil disruptions adversely affected the normal development of higher education in China. When Beijing, Tianjing and Shanghai, the three largest cities in China, fell into the hands of the Japanese in 1937, education suffered a great loss. Even the Kuomintang government admitted that "the ignition of war damaged the government's institutions and schools and most of the books, facilities and equipment were destroyed". Before the war, China had 108 universities, but in only one year's time, July 1937-August 1938, 91 of them closed due to the effect of war. Forty per cent of the middle schools were in the Japanese occupied territory. The government immediately moved some key universities to the hinterland with a view to keeping teachers and students together for the continuation of education during the war.

To suit the special circumstances of 1938, all the public universities adopted a common admissions scheme for students. When the Pacific War broke out in the early 1940s, the universities had to enrol students near their locations due to communication and transportation blockades. In 1943, all the schools above vocational secondary education enrolled students through four channels: individual enrolment, joint admission, entrusting other schools with students selection, and examination. After the war the universities all adjusted the curriculum and the length of studies, and, in addition, granted loans to students who were without financial support.

The slow and uneven development of higher education before 1949 can be attributed to the adverse political factors outlined above.

Economic factors. China is still at the preliminary stage of socialism. With its large population and low productivity, GNP per head is among the lowest in the world. About 800 million people out of a population of nearly one billion live in rural areas and use primitive tools to make a living. Though some parts of

the country are highly-developed, vast areas remain poor and under-developed. Many people can barely manage to obtain enough food and clothing to sustain life and have no excess income for such things as education. Educational opportunity depends on the financial situation of the family. In China, though university students do not have to pay for tuition and lodging, the living costs have to be covered by students themselves. (Since living costs of students in normal and agricultural universities are also covered by the government, this has resulted in more students from rural areas being enrolled in these institutions). A sample survey conducted by the National Women's Association showed that 38.08 per cent of 622 female students in five universities receive little or no financial support from their families, and they have to depend on the grants-in-aid provided by the government. Sixty per cent of them desire a reduction in the prices of textbooks, and an increase in the grants-in-aid and scholarships. Students also hope that more work-study programmes will be provided.

About 80 per cent of China's population live in the countryside and household income remains low. In order to make both ends meet, farmers have to be engaged in exhausting and complicated manual work and can hardly spare any time and money for the education of their children. A survey showed that only 2.46 out of every 10,000 women in rural areas received middle school education. With the introduction of the 'responsibility system' in rural areas in recent years, households with more labourers are in a more favourable economic position. This has brought about the situation in which parents discourage education for their children, especially female children. A large number of females drop out in upper grades in primary schools. The drop-out rate in some areas is as high as 50 per cent.

Ideological

There is no evidence that the male is superior to the female in terms of intelligence. Nevertheless, social, historical and cultural factors do form ideological and psychological barriers to females' education: "a female does not have a future if she specializes in science and engineering fields", "females need no more than a stable job", and many other public opinions of this type negatively influence teachers, parents and students. Consequently, the society places lower expectations on the females. Some teachers in university have also developed prejudice against female students and argue that "females react too slowly", "females are not as clever as males", "females need no more than a stable job after graduation". The preference for males is obvious in some cases. For example, preferential consideration is always given to males in the selection of post-graduates. This bias, where it exists, has an immediate impact upon female students. Middle school teachers, who have much influence upon the choice of universities by students, usually discourage females from specializing in science and engineering fields. And in those universities where the expectations placed upon female students is low, the opportunity to fully tap their potential is lost.

According to a sample conducted by the National Women's Association in five engineering universities in Beijing, 36.9 per cent of the answers from 622 female students point to the fact that teachers give more attention in the classroom to

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males. All the males attending one of the seminars held in conjunction with the survey indicated that girls should do the household chores and take care of children. About 63 per cent of the males considered it ideal to marry females who are "kind and tender". Obviously, social prejudice contributes to the inferior status of women.

Given the prejudices and ideologies as specified above, it is not surprising that female university students face various psychological problems. For example, they seem to face problems regarding self-worth and self-confidence. Forty-six per cent of the female students interviewed in the above-mentioned sample survey considered "lack of self-confidence and will-power" as the major factor affecting their academic performance. Fifty-three per cent viewed their personality as 'weak'. In one of the answers to the questionnaires, a female student wrote: "I feel bound by something invisible. Though I told myself that I can do something if I try hard, my actions always disappoint me. I feel so self-abased, not a bit of self-confidence".

The growing independent mentality, which distinguishes the present female university students from those of the past, goes together with the tendency to conform to traditional values. On the one hand, female university students are becoming increasingly independent both financially and politically. On the other hand, a sense of conformity and dependence, which runs against independent thinking, is still common among female students. Many female students find it difficult to broaden their horizons and build up their ability for independent thinking and creativity.

It is the idea of some female students interviewed in a survey in Qinghua University that despite their potential for excellent performance, female students still fall behind in creative ability and general knowledge. As one female student explained in an interview, "even when talking to a male student who is not very outstanding, I still feel that he is much more knowledgeable than I am". To ensure good grades in exams, female students tend to devote all their time to classwork and little time is left for extra curricula reading. In doing so, their knowledge is very much confined to textbooks.

Unfortunately, it seems that some young men give more consideration to the personal appearance of females rather than to the intrinsic qualities of females and would like to marry those who are tender, considerate and able to do the housework. The more schooling females obtain, the more difficulty they have in finding a husband. Women who remain single are usually the ones who are ambitious in their careers and have a high educational background.

Legal

With the establishment of the public ownership system in China, the fundamental roots of oppression for women were removed. The law stipulates that women and men should be treated as equals, and women's equal access to education and employment and the principle of equal pay for equal work are protected by law. But the authority of the husband, which lasted for thousands of years, is still felt in the minds of women and in the society as a whole. The idea that "men are superior to women" and other forms of prejudice against women continue. Women

in some regions and units are accorded insignificant political and social roles. Some of them complain that despite their equal success with males in the same occupation, they do not enjoy equal opportunity for training and promotion.

Another problem for professional women is misunderstanding and jealousy arising from, as ironic as it may seem, success itself – a phenomenon which seldom happens to men. Instead of being understood and appreciated by other women, friends and husbands for the price they paid for successful careers, professional women have to withstand the pressure of envy and resentment. Professional women present a challenge to others, and some men are patronizing in their attitudes. But it is encouraging to note that professional women are not content with playing a minor role in society and from the evidence collected in this study, it seems that most professional women resent barriers to career advancement.

Infrastructure

Gender structure of the workforce. According to the third National Census, the economically active female population in China is 227,844,338, accounting for 46.6 per cent of the total female population. Females work in all fields, making their contribution to China's social and economic development. The distribution of the female workforce by field of employment is presented in Table 2.18.

Although Chinese women work in various departments and trades in the national economy, the majority are concentrated in agriculture, forestry, husbandry and fishery rather than in industry, commerce, restaurants and food stores, supply and selling of goods and materials and storage of goods. The population in scientific research and technical service is small. Even in professions like education, culture and arts the percentage to women is 0.1 – 1.9 per cent and in some other trades the percentage of women is also relatively low.

A close look at the occupational distribution of Chinese *professional* women also illustrates the concentration of females in a few occupational categories (Table 2.19).

In addition to the occupations listed in Table 2.19, a small proportion of professional women are also engaged in editing, library services, interpretation services and economic management. Most of the female professionals are involved in health services or work as college and middle school teachers. Only a few of them are engaged in scientific research, particularly in social science research.

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Table 2.18 Distribution of Chinese working women classified by field of employment

Profession	Percentage
Agriculture, forestry, husbandry & fishery	78.0
Industry	12.8
Geological survey & prospecting	0.1
Construction	0.9
Communication, transportation, Post & telecommunications	0.9
Commerce, restaurant, food store, supply, selling & storage of goods	2.9
Neighbourhood & public services	0.5
Medicine, sport, social welfare	0.9
Education, culture, arts	1.9
Scientific research, technical service	0.2
Finance, insurance	0.1
Government offices, Party organization	0.7
Other	0.1
Total	100.0

Table 2.19 Occupational distribution of Chinese professional women

Occupation	Percentage
Health service	31.9
Middle school and college teachers	23.0
Accountant	17.9
Engineering	15.5
Statistics	4.3
Scientific research	2.6
Social science research	0.2
Agriculture technology	1.6
Literacy and artistic creation	1.0
Other	2.0

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Table 2.20 Gender distribution of technical personnel
(including teachers) in state-owned enterprises
and institutions

		figures in 1,000's			
		1982	1983	1984	1985
Total	Total	6264.4	681.9	7466.2	7816.7
	No. female	1982.8	2168.5	2396.2	2462.9
	Per cent female	31.7	31.6	32.1	31.5
Technical personnel	Total	2354.6	2802.3	3162.5	3404.1
	No. female	397.9	492.3	579.8	623.0
	Per cent female	16.9	17.6	18.3	18.3
Agricultural technician	Total	361.8	404.7	434.6	450.7
	No. female	50.4	58.5	64.6	63.9
	Per cent female	13.9	14.5	14.9	14.2
Medical personnel	Total	1807.1	1934.1	2078.5	2161.0
	No. female	1046.3	1139.1	1246.4	1279.5
	Per cent female	57.9	58.9	60.0	59.2
Researcher	Total	371.8	328.1	334.8	336.4
	No. female	102.9	92.2	96.1	98.5
	Per cent female	27.7	28.1	28.7	29.3
Teacher	Total	1369.1	1382.7	1455.8	1464.5
	No. female	385.3	386.4	409.3	398.0
	Per cent female	28.1	27.9	28.1	27.2

Table 2.20 lists the distribution of female technical personnel in state-owned enterprises. The distribution of female technical personnel in state-owned enterprises can be summarized as follows:

- a) Female technical personnel make up about one third of the whole of technical personnel;
- b) Female medical personnel make up nearly 60 per cent of the total;
- c) Technical personnel in other scientific departments in descending order are: Researcher (29.3 per cent); Teacher (27.2 per cent); Engineer (18.3 per cent); and Agricultural Technician (14.2 per cent).

The number of female technical personnel who hold advanced professional titles (i.e., professor, associate professor, research fellow, associated research fellow, senior engineer, physician-in-charge, senior account, etc.) and their percentage of the total are as follows: 1978, 1,412 (7 per cent of the total); 1983, 9,237 (11.4 per cent of the total). While it is clear that females are contributing to the development of the nation at the highest professional levels, it is also clear that their rate

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of participation in the professions, both in terms of proportion and rank, is not equal to that of men.

It also seems that some sectors of society would rather employ males than females, even if the females have better academic qualifications. Such discrimination is not present in universities, which select employees on merit. But there are employment sectors which reject females. In 1987, for example, some 200 departments selecting graduates from Beijing Second Foreign Language Institute said that they were not going to accept female applicants. Obviously, a large number of female students will be disadvantaged in the employment market if such practices are not altered. Some departments and units reject female applicants because of the perceived problems of pregnancy and child-rearing. Instead of fully appreciating the contribution that women make to society as mothers and protecting their rights, some employers consider women to be a hindrance to production. As explained by one employer, "if we accept a women, she is going to take up one quota in the establishment. And she will get pregnant, give birth to children and raise them, all of which is so time-consuming and troublesome".

In view of the employment difficulties facing female graduates, university authorities have to limit the number of female enrolment, and women have to achieve higher test scores than men before being admitted into universities or employment. If a man and a woman with equal qualifications are being considered for entry to university, priority is always given to the male. Even in medicine and the teaching profession, which employ a considerable number of women, unjust practices of this type take place. Among the first-year students admitted into Normal University of Northeast China, no male student has scored the highest marks in the entrance examination and no female student is among those with the lowest marks. Despite legal equality between men and women, in practice, sexual discrimination persists.

Educational factors. The number of women aged 20 years with middle schooling background is 50 times as many as those women aged 50 years. The number of women under 40 years with university backgrounds decreased as compared with the age group between 40 years and 49 years, an indication of the disastrous effect on education of the 'Cultural Revolution'. Despite the fact that women are receiving more education and the gap between men and women is narrowing, they still make up a small part of the educated population as a whole. While women account for 25.7 per cent, 34.7 per cent and 42.4 per cent in the group with university, middle schooling and primary schooling background respectively, they make up 69.2 per cent, namely, two-thirds of the illiterate population, which is estimated at more than 200 million in China. The employment rate of women among the age group from 15 years to 19 years is higher than that of men by 7.3 per cent which indicates that more school-aged girls drop out of school and prematurely take up the heavy responsibility of running the household. From 1976 to 1983, the female student enrolment in middle schools ranged from 39 per cent to 41.7 per cent. This low middle school enrolment has a direct effect upon university enrolment. Furthermore, about one-third of women aged 20 years are illiterate or semi-illiterate.

Review of policies, programmes and strategies for the promotion of women's participation in higher education

The revolutionary movement. The Chinese Communist Party (CCP) has always attached great importance to women's liberation and their education, and regards the women's movement in the fields of politics, economy, culture and education as an important part of the new democratic revolution.

The breakout of the 'May Fourth Movement' coincided with the birth of the Communist Party of China. Chen Duxiu and Li Dazhao, initiators of the new cultural movement, advocated women's liberation and the anti-feudalism campaign. They opposed the feudal ethical code and imperial authority. They upheld liberty and freedom, individual liberation, freedom of marriage and equality between men and women. They also rejected the concept that "wives should have the same political belief as their husbands", and the three 'obeys' in the ethical code. Chen and Li publicly advocated the economic independence of women, their free choice of work and their free participation in society, all of which were taboo in the past. They strongly demanded equal educational opportunities for women. In February 1919, Li Dazhao pointed out in the *Beijing Morning Daily* that everybody should have access to education, especially the working people, and that working women should have the same right to education as working men. Mao Tsetung vehemently criticized the authorities of Hunan Province who had not given much attention to women's education, though its annual education budget was about 1,104 million yuan. There were three women's normal schools in the province with a budgetary allocation of only 86,493 yuan. It was absurd that, in such a province with 15 million women, there did not exist even a single middle school for girls. In the budget of 1921, ten thousand yuan was unprecedentedly appropriated for "a potential girls middle school", and the total annual budget for women's education in Hunan Province approached 100,000 yuan, still less than 5 per cent of the total education expenditure. Even such a small budget allocation to female education was opposed by some parliamentarians.

During the second 'civil war', a democratic worker-peasant government was set up in the 'Red Zone'. In November 1933, the National Congress of Workers, Peasants and Soldiers was held, which drafted and adopted the "Constitution of the Chinese Soviet Republic". The Constitution stipulated that "the Chinese Soviet authorities pledge to see to women's liberation, recognize the freedom of marriage, carry out the measures of women protection, so as to ensure that women can be freed from the bondage of housework and fully participate in socio-political, economic and cultural activities".

During the Japanese War and National Liberation War, the Chinese Communist Party enacted a series of legislative rules and regulations with a view to ensuring women's equal rights to education.

The founding of the Chinese Communist Party was accompanied by the establishment of many girls' schools. For instance, the Civilian Girls' School in

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Shanghai was set up quite early. Every revolutionary 'base' opened up some women's vocational schools. It was stipulated that schools of various levels should admit all students regardless of their sex. China's Women's University, founded by the Party on 10th July 1939 in Yen-an, turned out many women equipped with revolutionary theory, ability to motivate the masses, and vocational skills.

China's Women's University aimed at training female officials and absorbing women intellectuals into the campaign against the Japanese and recruited more than 1,000 students aged between 18 and 22 years from 21 provinces, including Taiwan. According to their educational background, the University divided them into normal class, senior class and class of Shaanxi cadres. The fundamental educational policy lay in "the study of the practical problems of the Chinese Revolution and basic theory of Marxism and Leninism". Mao Tsetung, Zhou Enlai and Deng Yingchao all lectured on the history of the Chinese Communist Party at this University. Major courses included: political sciences, history of social development, contemporary history, guerrilla warfare, national united front, and problems relating to the Party and to the women's movement. By 1941, China's Women's University and other schools had merged into "Yenan University".

Legal advancement. After the founding of the PRC in 1949, women's legitimate rights have been protected by law. The 'Common Programme' of the Chinese People's Political Consultative Conference, serving as a provisional constitution on which the country was built, stipulated among other things that "the feudal system that fetters women is to be abolished. Women enjoy exactly the same rights as men in political, economic, cultural, educational and social aspects". In 1950, the government issued the Marriage Law of the People's Republic of China. The guiding principle of the Marriage Law was to abolish the feudal marriage system that sanctioned arranged marriages, male superiority, female inferiority and negligence of the interests of children. The new marriage system stands for freedom of marriage, monogamy, equal rights between men and women, protection of women and the legitimate rights of children. Bigamy, child brides, and interference in the freedom of widows are forbidden and no one is allowed to arrange marriage for financial gain. In 1980, the people's government enacted a new marriage law. The law raises the marriageable age and adds a few new sections and articles on family planning and the protection of the rights of the aged. Freedom of marriage is generally practised. In most families there has appeared an atmosphere of democracy, harmony, unity, and equality. Both husband and wife take the responsibility for decisions on family matters.

In 1953, the Electoral Law of the National People's Congress and the Local People's Congress stipulated that women had the right to vote and to stand for elections. The first Constitution of the PRC clearly stipulated that women enjoyed equal rights with men in all spheres of life. In 1982, the Constitution of the People's Republic of China adopted by the Fifth National People's Congress at its Fifth Session further perfected the articles concerning the protection of women's legitimate rights. It stipulates that:

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Women in the People's Republic of China enjoy equal rights with men in all spheres of life – political, economic, cultural and social, including family life. The state protects the rights and interests of women, applies the principle of equal pay for equal work for men and women alike and trains and selects cadres from among women. Marriage, the family and mother and child are protected by the state. Both husband and wife have the duty to practise family planning. Parents have the duty to rear and educate their young children, and children who have come of age have the duty to support and assist their parents. Violation of the freedom of marriage is prohibited. Maltreatment of old people, women and children is prohibited.

The law fully ensures that the rights of women in all spheres of social and economic life are inviolable. Since 1949, women in China have a non-governmental organization of their own, i.e., the All-China Women's Federation.

Political participation. In China, women as well as men administer national affairs. Women's political life has changed and their political status has been raised. In 1981, 95 per cent of the female population took part in the country-level direct elections. Female delegates at the county congresses generally made up about 20 per cent of the total, and in some places the percentage was as high as 45 per cent. In 1954 at the First National People's Congress the female delegates only accounted for 12 per cent, but in 1983 at the Sixth National People's Congress female delegates made up about 21 per cent of the total number of delegates. Women in China not only have the right to join in the discussion of state affairs and to put forward opinions and suggestions, but also have the opportunity to assume leading positions in the People's Congresses and in the People's government at all levels. There have been female ministers and vice ministers in the successive State Councils. In the First State Council there were six female ministers and in the Sixth, the figure reached twelve. The President of the Head Office of the Chinese People's Bank was a woman. Before 1949 there were only two female provincial deputy governors. Now there is the first female provincial Party Secretary. There are 5,600 female legal officials holding positions like president of court, chief of court, and judge. In recent years the Party and government pay particular attention to placing women who have ability, political integrity and expertise in leading positions.

Workforce participation. In China, according to law, female workers enjoy equal pay for equal work. Female participation in productive work is the first prerequisite of women's liberation. Since the establishment of the PRC, the rate of female employment has risen, as has their rank. In 1949 there were 610,000 female workers. But in 1983 the figure reached 41,990,000, 68 times that of 1949. The percentage of female workers at the time of the founding of the PRC was 7.5 per cent of the total workers, but in 1983 it was 36.5 per cent. The area of work for women has developed to cover industry, commercial and service trades, construction, transportation and postal and telecommunications, agriculture, forestry, water conservation, meteorology, culture, education and medicine, scientific research, finance and insurance businesses, city, Party and government offices and

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mass organizations. In some new technical sectors, like the electrical industry, the ratio of female workers to male worker is 40:60. According to the 1982 census, the employment rate among the people of working age is 86.7 per cent. For men it is 91 per cent and for women, 81.7 per cent. The employment rate of women in China, compared with that of other countries, is not low. Moreover, female employees are highly valued. In 1979, for example, the State Council named 104 female model workers who made up 18 per cent of the total number of model workers in the country.

Along with improvement of economic, political and social status for women in China, their cultural, scientific and technical level has also been raised. The Chinese Communist Party maintains that it is necessary for women to obtain knowledge of culture, science and technology for national development and social reconstruction.

With the development of China's socialist economy, living standards have improved. Health care has risen and the life-span for women has been extended. In the past, the average life expectancy for women was 36 years. Normally, the life-span of women is longer than that of men. However, in the past, the life-span of women was 3.7 years shorter than that of men. Now the average life-span of women in China is 69.4 years, three years longer than that of men, a figure close to that of the advanced countries of the world.

Indepth empirical case studies

Institutional profiles

The following is drawn from a preliminary sample survey of female students and teachers in three kinds of key universities of national level under the direct authority of the State Education Commission. They are Qinghua University, Beijing University and Beijing Normal University, each of which has a long history and international standing. The study is based on interviews, discussions and questionnaires.

As the capital of China, Beijing has a more advanced economy and culture, and the participation of women in various aspects of higher education is higher here than in some other parts of the country. For example, in 1986 there were 1,579 professors in colleges and universities in Beijing of whom 10 per cent were women. Among the 6,652 associate professors, 1,585 (21.1 per cent) were women. According to 1985-1986 statistics, the total number of undergraduates in institutions of higher learning in Beijing was 122,791, of whom 39,316 were female (32 per cent). The number of post-graduates was 15,791, of whom 3,428 were female (21 per cent). The number of full-time teachers was 33,668, of whom 11,483 were female (34.2 per cent).

Qinghua University. Qinghua University is a renown comprehensive university in China, concentrating on engineering courses. Its predecessor was Qinghua Xuetang, which was founded in Beijing in April 1911, offering senior and secondary

courses. Following the 1911 Revolution, it was renamed Qinghua School. With the establishment of Department of Higher Learning in 1925, it began to enrol students for a period of schooling of four years. After it was taken over by the Kuomintang government in 1928, it was renamed State Qinghua University. In 1937 when the War of Resistance against Japan broke out, the university was moved to Kunming, where it joined Beijing University and Nankai University in forming the South-West United University. In 1946, Qinghua University was moved back to its original site and re-established. It consisted of 26 departments under the five colleges of Literature, Law, Science, Engineering and Agriculture. After the founding of the People's Republic, restructuring of colleges and departments was carried out in order to meet the demands of socialist construction, and the university set up the Departments of Construction, Civil Engineering, Hydraulic Engineering, Mechanical Manufacturing, Mechanical Kinetics, and Electrical Machinery. The university gradually evolved into a comprehensive university with engineering as its centre. Up to 1984, there were 20 departments in the university. In 1984, the university established the Graduate School and the College of Economic Management. Qinghua University has also 22 research institutes, 87 laboratories, 10 factories or workshops for education, scientific research and experiment. The university library houses two million books, one-third of which are in foreign languages.

The length of schooling of the undergraduates in the university is five years, while that of post-graduates for masters and doctors degrees is two and three years respectively. In August 1984, the university had 10,000 undergraduates, 1,500 post-graduates (masters and doctors level), and 44 foreign students from 17 countries. There were 3,592 teachers and research workers, including 758 professors and associate professors. From 1949 to 1984, the university produced 47,000 graduates, 20 times as many as the total number of the graduates trained before 1949.

The percentage of female students majoring in various engineering sub-disciplines was as follows: 3.6 per cent in the early 1950s; 16.3 per cent in 1981; 16.8 per cent in 1982; 18 per cent in 1983; 18.4 per cent in 1984; 19.6 per cent in 1985. While the percentage has been rising over the years, it has never exceeded 20 per cent.

In 1986, the university enrolled 13,206 students, of whom 2,473 or about 19 per cent were female. The percentage of female students in the following fields of study were: 14 per cent in engineering, 1 per cent in science, 0.3 per cent in foreign languages, 0.3 per cent in other social sciences. There were 2,092 masters degree students, of whom 328 or about 16 per cent were female.

In 1985, there were two women professors in the university (1.9 per cent of the total); 81 female associate professors (12.4 per cent); 730 female lecturers (32.96 per cent); and 232 female instructors (31.14 per cent). Among the managing personnel (party and governmental cadres), there were 502 women or 46.31 per cent of the total. In 1986, among full-time women teaching staff, there were five professors (2.6 per cent of the total); 139 associate professors (16.8 per cent);

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five senior lecturers (35.7 per cent); 603 lecturers (35.6 per cent); and 153 assistants (32.4 per cent). In addition, there were 18 women assistant research fellows (19.8 per cent); and four women senior engineers (34.02 per cent). Among the management staff, there were 96 cadres above the level of head of department, of whom six were women, 223 cadres above the level of deputy head of the department, of whom 34 were women.

Beijing University. Beijing University is a key comprehensive university of both social and natural sciences. Its predecessor was Grand School founded in 1898, which was an outcome of the 1898 Constitutional Reform and Modernization. There were about 100 students in the school at that time. In 1902, it began to offer accelerated and preliminary courses. In 1903, it established a school of translation and interpretation, and a school of Jinshi (required for the highest imperial examination). Meanwhile, it established colleges which offered 46 courses in economics, law, liberal arts, science, agriculture, engineering, commerce and medicine. In 1912, the school was renamed Beijing University. In 1920, the university started to enrol female students, the first to do so among institutions of higher learning in China. In 1937, when the War of Resistance against Japan broke out, the university was moved to Kunming, where it joined Qinghua University and Nan Kai University in forming the South-West United University. The United University consisted of 26 departments under five colleges of liberal arts, science, engineering, law, and teacher-training. In 1940, Beijing University returned to Beijing, and established six colleges of liberal arts, science, law, medicine, agriculture, and engineering. A number of specialists and scholars with great learning and attainments work in the university, which produces a great number of qualified personnel with special skills, thereby accelerating directly and indirectly the advancement of Chinese culture and science.

Over 34 years before 1983, the university produced 40,000 graduates and post-graduates for the country and many important scientific results. Presently, the university has 25 departments. There is also a Graduate School with 104 specialities leading to masters degree and 54 specialists for doctors degree. In addition, there are 17 research institutes; five research centres and 17 research offices. The library has a collection of 3.5 million books and more than 20,000 periodicals. The university also has a publishing house.

The length of schooling for undergraduates is four years (five years in a few departments and specialities) and that of post-graduates for masters and doctors degrees is two and three years respectively.

In 1984, there were 12,000 students studying at the university of whom 8,600 were undergraduates; 1,600 were post-graduates, 500 were professional trainees; 400 were teachers for vocational training; 1,000 were correspondence students and 260 were foreign students from over 40 countries and regions. There was a teaching-research staff of 3,000 of whom 800 were professors and associate professors (including 18 members of the Science Council of the Chinese Academy of Science and 96 tutors for doctoral students), and 1,300 were lecturers. In addition, the university has engaged over 80 eminent scholars both at home and abroad

as part-time professors. And more than 40 foreign specialists are working in the university as teachers.

According to a 1986 survey, there were 2,970 female undergraduates. Among them 1,437 majored in science, accounting for 16.34 per cent of the total science students; 257 majored in law, 2.92 per cent of the students in that department; 37 majored in psychology, 0.42 per cent of all psychology students; 378 majored in foreign languages, 4.3 per cent of all foreign languages students; and another 861 specialized in the social sciences, 9.79 per cent of all social science students. There were 765 female post-graduates students: 27 in engineering; 243 in science; 126 in law; eight in psychology; 67 in foreign languages; and 294 in various sections of the social sciences.

By 1986, there were 760 full-time women teachers in Beijing University, making up 38.5 per cent of the total full-time teaching staff. Among the female teachers there were 33 professors (11.58 per cent of the total); 218 associate professors (24.74 per cent); 364 lecturers (35.2 per cent); and 126 assistants (26.42 per cent). There were 68 females with rank of head or deputy head of a department, constituting 20.3 per cent of the total.

Beijing Normal University. Beijing Normal University is a key university in China comprising both liberal arts and science subjects, with an emphasis on teachers' training. Its predecessors are Beijing Senior Normal School and Beijing Girls' Senior Normal School, the former used to be the Normal Institute of the Capital's Grand Normal School established in 1902, which was re-named Beijing Senior Normal School after the Revolution of 1911, and converted to Beijing Normal University in 1922. The latter, Beijing Girls' Normal School was established in 1906, renamed Girls' Senior Normal School after the Revolution of 1911 and 1924 became Beijing State Girls' Normal University. In July 1931, Beijing Normal University and Beijing State Girls' Normal University were merged into Beijing State Normal University, which was divided into three institutes, namely, the institute of arts, the institute of science and the institute of education. After the outbreak of the war with Japan in 1937, the university, together with Beijing University and Tian Jin Northern Institute of Engineering, formed an interim university in Xian, which was named the North-West United University. In 1939, the Normal Institute of the United University became independent as the North-West Normal College and moved to Lanzhou. After the war, the students and faculties of the former Peking Normal University returned to Beijing.

Following the founding of the People's Republic of China, the university was officially named the Beijing Normal University. During the period of realignment among universities and colleges in 1952, the educational departments of Beijing University, China's People University and Yan Jing University as well as Furen University were merged into Beijing Normal University, enlarging its size and improving the quality of education. In 1984, the university set up 17 departments which contained 23 disciplines. The period of schooling in most of these departments is four years. There are nine research institutes and a number of research offices, as well as educational and teaching research institutions. It has also

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established an institute for post-graduates and an institute for administration. For teacher education purposes the University has three attached middle schools, one experimental primary school and one experimental kindergarten. The library, with a publishing house of its own, houses 2.5 million books.

In the 1983-1984 academic year, the university had 4,505 undergraduates (about one-half of whom were female), 371 post-graduates, 410 graduand students from other institutions of higher learning, and 1,563 full-time teaching staff members: 75 professors (three of whom were members of the Science Council of the Chinese Academy of Sciences), 306 associate professors, 686 lecturers, 475 assistants and 21 instructors. In addition, there were 274 scientific and research personnel in the university. Twenty-two disciplines offer the doctoral degree and 61 offer the masters degree employing 28 and 284 tutors respectively. From 1949 to 1984, the university trained a total of 19,000 undergraduates and 2,100 post-graduates.

By 1986, there were 521 females on the teaching staff in Beijing Normal University, 34.7 per cent of the 1,500 full-time teaching staff members. Eight were professors (10.96 per cent of all professors); 96 were associate professors (37.4 per cent); 294 were lecturers (36.3 per cent); and 130 were assistants (43.6 per cent of all assistants).

Summary. The extent of female participation varies among the three higher education institutions examined above. The Beijing Normal University ranks first with female students accounting for almost half (49.7 per cent of the total number of undergraduate students, and one-third of the post-graduate students. Qinghua University has the lowest female student participation ratio, with the female students making up less than one-fifth (18.7 per cent of the undergraduate population, and less than one-sixth (15.7) per cent of the post-graduates.

The proportion of female teaching staff members in Beijing University is about the same as in Beijing Normal University, namely, about one-third of the teachers are female (Beijing University, 38.58 per cent; Beijing Normal University, 34.7 per cent). Beijing University and Beijing Normal University have a relatively higher proportion of female staff holding senior academic rank. The female professors account for 11.58 per cent in Beijing University, and 10.96 per cent in Beijing Normal University. Female associate professors in Beijing University constitute 24.74 per cent of the total number and in Beijing Normal University, 37.4 per cent. By contrasts, Qinghua University has the lowest proportion of female teaching staff members with senior professional titles. Female professors constitute only 2.6 per cent of the total and only 16.8 per cent of the associate professors are female.

Selected enrolment statistics: Sichuan Province

In order to understand more fully the extent and nature of female participation in Chinese higher education, it is worth while to look at the university enrolment statistics of a particular province. The following data is from the Sichuan Provincial Admissions Office (Table 2.21).

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Table 2.21 Gender distribution of students enrolled
in the universities in Sichuan Province

Year:	1979	1980	1981	1982	1983	1984	1985	1986
Total No. of students	17,935	17,474	18,036	19,315	21,933	27,135	29,303	35,824
No. of female students	4,509	4,347	4,793	5,261	5,806	7,553	8,352	11,812
Per cent female	25.14	25.03	26.57	27.24	26.47	27.83	28.50	32.97

The Table 2.21 shows that from 1979-1986 the total number of students enrolled in the universities in Sichuan was 186,955, out of which there were 52,433 female students accounting for 28.06 per cent of the total.

The students can be further grouped according to major discipline areas: natural sciences and liberal arts (Table 2.22).

Table 2.22 Gender distribution of students enrolled in the universities
in Sichuan Province by year and major discipline area:
Natural Sciences and Liberal Arts

Year:	Natural Sciences							
	1979	1980	1981	1982	1983	1984	1985	1986
Total No. of students	13,824	13,899	13,382	14,361	16,982	20,172	21,686	25,205
No. of female students	3,193	2,918	2,993	3,133	3,576	4,585	5,576	6,660
Per cent female	23.10	20.99	22.37	21.82	21.01	22.73	26.61	26.42
Liberal Arts								
Total No. of students	4,111	3,575	4,654	4,951	4,951	6,963	7,617	10,619
No. of female students	1,316	1,456	1,800	2,230	2,230	2,968	2,776	5,152
Per cent female	32.01	40.73	38.68	45.04	45.04	42.62	36.44	48.52

Source: Sichuan Provincial Admissions Office

Table 2.21 and 2.22 indicate that:

- a) The number of female students who chose natural sciences was slightly larger than the number who chose liberal arts.

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- b) The number of female students who study disciplines in the liberal arts is increasing. The number of female students in natural sciences rose from 3,193 to 6,660 during the period 1979-1986, an increase of 109 per cent. But the number of female students who chose liberal arts rose from 1,316 to 5,152 in the same period, an increase of 291.5 per cent.
- c) In 1986, nearly one-half (48.5 per cent) of the students enrolled in liberal arts were female. Before 1980, the number of liberal arts students was declining. This was due to the fact that there had been a trend to regard natural sciences as superior to liberal arts and people thought that there was no future for the liberal arts. This attitude is changing and the number of people who study liberal arts is gradually increasing.

Table 2.23 Choice of disciplines: Sichuan Province

Discipline	Female Middle School Graduates (%)	Female College Students (%)
Dress Design	79.80	88.30
Medicine	65.90	78.00
Textile	53.20	77.50
Psychology	70.90	75.20
Horticulture	42.30	55.30
Environmental Protection	31.80	55.10
Telecommunications	31.80	48.30
Biology	36.00	44.90
Computer Science	33.30	30.10
Automatic Control	37.50	27.80
Basic Science	10.90	13.60
Agriculture	5.20	12.50
Civil Engineering	8.30	11.90
Forestry	7.50	8.70
Hydrology	3.00	8.70
Military Supplies	4.50	6.40
Machine Building	3.70	6.10
Geography	3.70	2.30
Petroleum	2.60	2.30
Mining	3.30	1.90
Metallurgy	3.70	1.70
Library Science	73.00	83.90
Arts	75.70	79.70
Teacher Training	68.50	76.70
Language & Literature	64.80	74.80
Journalism	64.40	68.40
Finance & Economics	65.20	62.50
Management	37.80	39.20
Politics	34.50	33.50
History	28.50	30.10
Philosophy	31.80	21.40

Note: The students may choose the disciplines in order of preference.

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The Sichuan Provincial Admissions Office surveyed 267 female middle school graduates and 472 female college students as to their choice of discipline. The findings are presented in Table 2.23.

The findings show that middle school female students preferred liberal arts to natural sciences. Of the disciplines in natural sciences, the most popular were: dress design, medicine, textile, psychology, horticulture, environmental protection, telecommunications, biology and computer science.

The findings of a similar survey in Hangzhou University are more or less the same as those in Sichuan Province (Table 2.24).

Table 2.24 Percentage of students majoring in Natural Sciences and Liberal Arts in Hangzhou University

Year	Female Students as % of Total Enrol.	% of Female Students in Natural Sciences	% of Female Students in Liberal Arts
1978	27.44	23.80	30.43
1979	25.35	19.32	30.89
1980	26.58	19.21	33.97
1981	27.70	19.38	36.37
1982	29.53	17.75	41.14
1983	30.11	17.88	19.50
1984	30.82	19.28	38.59
1985	30.59	20.54	37.28
1986	31.51	23.28	37.57

Source: Office of Studies of Hangzhou University

Survey results

Student attitudes. Female students have a variety of interests. The questionnaires issued to 1,146 female students in 16 universities in Shanghai show that 59 per cent of them are ready to learn musical instruments and chess, calligraphy and painting, ball games and gymnastics. About 58 per cent would like, in their spare time, to go to cinemas, theatres, exhibitions, musical coffee bars, parties and joint recreation clubs.

In general, the female students have a growing sense of self-respect, self-confidence and self-improvement. Their attitude towards the future is shown in Table 2.25.

From the results, we see that the female students who chose the first two categories ("clear objectives and consistent effort" and "optimistic and making progress") accounted for 71.1 per cent of the respondents. Clearly, the majority of them have overcome or are overcoming anti-feminist traditions. They are after a definite goal. The recognition of their own value greatly enhances the position of female students and helps them to play a more active role in universities. Both

Table 2.25 Students' attitudes about the future
(frequency of response in percentages)

Percentage	Attitude			
	Clear Objectives and Consistent Effort	Optimistic and Making Progress	Optimistic but Uncertain About Future	Disconsolate and Devoting Little Effort
Male	15.2	55.9	21.8	6.7
Female	31.8	40.9	18.2	4.5

the Students' Union President and the Director of Students' Centre of Fudan University are female students. The male students at East China Normal University also admitted that in their university the females have a say.

Female students in the institutions of higher education can be appropriately called "the elite of young women". They enjoy support from their parents, relatives, friends and the whole society for their education. Most of the female college students choose their major in accordance with their own wishes and interests. Because of hard work, they have done fairly well in their studies; there is not much difference between male and female students with regard to academic performance. Of the 370 female students who graduated in 1982, 1983 and 1984 in Qinghua University, proportionately their academic achievement was roughly the same as that of the male students. In 1985, the female students constituted 21.9 per cent of the post-graduates newly admitted into that university.

With regard to their area of academic specialization, most female students choose such disciplines as foreign languages, social sciences (mainly literature, history or education), medicine and health, biology, psychology and analytical chemistry.

Female students have begun to change their way of thinking about both themselves and the society in which they live. They have strengthened their sense of independence, they are devoted to their careers, full of confidence and possess a sense of self-importance. According to the questionnaires on the future destiny of females which was distributed to 243 female university students, including post-graduates, in six disciplines of science, engineering, agriculture, medicine, literature and foreign languages, 37.45 per cent were under 20 years old, 66.79 per cent were aged 21 to 25 years, 3.29 per cent were between 26 and 30 years of age, and 2.47 per cent were over 30 years old. The undergraduates made up 69.14 per cent of the sample, post-graduates (masters degree) accounted for 28.81 per cent and doctoral candidates constituted 2.06 per cent of the sample. About 56 per cent of the females sampled were from Beijing, Tianjin, Shanghai and provincial capitals, 36.2 per cent came from small and medium-sized cities and 8.2 per cent came from rural areas.

These young women have assembled in Beijing from all parts of the country because of their good academic performance and other qualities. One of the questions on the questionnaire was; "What do you think is most important to you as a women?" The seven choices were ranked accordingly: independence (48.79 per cent), career (18.93 per cent), family (15.64 per cent), husband (6.17 per cent), beauty (4.12 per cent), youth (3.7 per cent) and children (0.41 per cent). Their understanding of independence is "having strong personalities and being able to determine their own destinies". For thousands of years in China, women have been regarded as the "moon which cannot give out light of its own". Their destinies have been determined by their fathers, husbands or even their sons. The personalities of women have long been suppressed and suffocated. The sense of independence of the female university students sampled here undoubtedly poses a challenge to tradition.

Over 70 per cent of the female students sampled considered that male students are no better than female students. The female students from the cities are even more confident of their academic and social abilities than their rural counterparts.

Most female students want to be successful in their careers. When asked "What do you wish to do in the future?", 90 per cent of them answered that they hoped to be successful in their careers. When asked "Why did you undertake college education?", 47.4 per cent answered that they wanted "a successful career", and 39.03 per cent said that they wanted to "strive for higher social status". Few were concerned about "finding a good job", "respectability" or "avoiding unemployment" *per se*. Many female students believed that their social status could be raised only through persistent pursuit and success in their career. This spirit of independence, self-respect, and self-confidence is indicative of the "new Chinese women".

Teaching staff attitudes. Female teachers in institutions of higher education and female scientists have a strong sense of career. Most of them are satisfied with their work. The interviewees considered that in colleges and universities there is equality between men and women in work, in having opportunities to pursue advanced studies, in promotion and in remuneration. They indicated that there is no prejudice against women, and men and women basically have equal opportunity. On the other hand, there is no policy or measure designed specially to favour women or to cater to the special needs of women.

All the colleges and universities investigated have a group of dedicated and accomplished female teachers, research personnel and those who have written or translated a large number of academic works.

Quite a number of female teachers and researchers have also made outstanding achievements in their research on higher education, higher normal education and primary and secondary education both in China and abroad.

Survey results highlight the following factors as contributing to the success of women.

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Ambition and devotion to career. Most of the successful women are both ambitious in their careers and wish to contribute to the development of society. Some of them are determined to bring credit to women in general and a few women are motivated by the desire for personal advancement. All women, with almost no exception, hope to achieve the highest levels possible in their respective fields of endeavour. All the outstanding women are characterized by a high degree of commitment to their profession.

Desire to obtain and extend knowledge. Female teachers and research workers in institutions of higher education attach considerable importance to spare-time study, which usually averages two hours every day. This is particularly obvious among the women with outstanding performances in the teaching and research field who give much attention to the assimilation and updating of their knowledge and to improving their professional skill and creative ability. Eighty per cent of them keep abreast with developments in their own field. They also attempt to diversify their learning. Seventy-five per cent of them are constantly exposed to foreign publications. Forty-five per cent of them have established extensive contacts with their counterparts at home and actively participate in academic seminars and symposiums. Twenty-two per cent of them are in constant touch with their counterparts abroad. These diversified channels provide them with much information, which is a factor of their success.

Self-respect. Outstanding female teachers, research workers and administrators face the dual task of both taking care of the family and succeeding in careers, and a great deal of effort is required in overcoming difficulties. At present, prejudice against women still exists and not a few people envy the women who are successful in their careers, not to mention a large number of people who argue that women are born to take care of the family and children. Women intellectuals have to shake off the feudal fetters and withstand prejudice and pressures of all kinds before they can achieve the ideal balance between family and career. This is exactly what most of the 'career women' are doing.

Conclusion and recommendations

Since 1949, the number and proportion of both female students and teachers in institutions of higher education have increased. Before the formation of the People's Republic of China, female students who enrolled in institutions of higher education constituted 17.8 per cent of the total number of students. In 1985, the percentage was 29.98 per cent. The proportion of female teachers rose from 10.98 per cent of all teachers in 1950 (there were no statistics in the pre-liberation era) to 26.69 per cent in 1985, over one-quarter of the total teaching population in institutions of higher education.

The increase in the number of female students and teachers demonstrates the growing success of the women's liberation movement in China and the protection of women's legitimate rights and interests. Many women have realized that

raising their level of education will not only meet the needs of the socialist modernization drive, but also help to enhance their own qualities and elevate their social status. Also, the expansion of the number of female students and female teachers is a result of the general development of China's higher education system. Since the founding of the People's Republic of China, higher education has developed rapidly. The importance of the role of education has been increasingly emphasized and augmented since the Third Plenary Session of the Eleventh National Congress of the Chinese Communist Party. At the Twelfth CCP National Congress, education was identified as one of the points of strategic importance in the socialist modernization drive. Furthermore, the principles, status and role of education have been included in the Constitution of the People's Republic of China, which was adopted at the National People's Congress in 1982. The Chinese Communist Party and the People's government attach great importance to education at all levels and the size of institutions of higher education has expanded considerably. In 1985, there were 1,703,115 students in regular institutions of higher education and 870,624 staff members, of whom 344,262 were full-time teachers. Along with the development of the higher education system, the number of female students and teachers also increased accordingly.

Recommendations

The remainder of this section presents a few recommendations with a view to raising the status of women and improving their opportunities to gain access to higher education.

Professional women not only contribute to society by participating in material production, but also contribute through human reproduction (child-bearing and housework). For some time, bearing and rearing children have been considered to be an individual matter, not a general social responsibility. It is now time that the social and economic value of human reproduction was recognized. The ultimate goal of human reproduction is to provide society with qualified manpower for social construction. The two kinds of production — material and human — have to be undertaken at the same time, without which the existence, continuity and development of society would be impossible. In this sense, the two types of production are equally important, with women making a dual contribution to the development of society. According to Soviet economists, if society was to replace mothers and housewives with paid employees, then it would have to employ annually some 100 million workers costing a total of 150 billion rubbles or 500 billion yuan a year. Professional women are creating just as much social wealth in their spare time as during office hours. The key problem is that this great contribution in financial terms is not recognized by society. China is now a socialist country based predominantly on public ownership. The family, which used to be the basic unit of direct or indirect material production, has become the logistic base of social mass production. A social labourer is born into a family, raised by his/her parents and grows both physically and mentally with the joint support of the parents and society before he/she becomes a qualified and self-supporting member of the society.

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But the society does not always adequately financially compensate the family for its efforts. The socio-economic value of housework tends to be neglected and underestimated. It is time that the public recognized the social value of human reproduction undertaken by women. The government policy-making bodies should be aware that women are undertaking two kinds of social production and making a dual contribution to mankind. Their contribution should not only be acknowledged by the society generally, but also deserves considerable compensation, attention and respect.

The most practical problem facing professional women in China is that they shoulder a heavier load than men. It is proper to say that men only take the responsibility of material and spiritual production while, as stated above, females have two tasks, namely, social production and human reproduction. After finishing the same amount of work as men at the office, professional women have additional responsibilities placed upon them. A president of a research institute in Tianjing once said "as a leader, I am fully aware that if a man and a woman with the same academic qualifications and age are equally successful, then the woman must be more capable than the man, for she shoulders a much heavier load". But policy does not reflect the difference. With regard to laws and regulations, it is obvious that women enjoy equal treatment in terms of payment and recognition of academic title, and they are guaranteed that they can compete on an equal footing with men. In reality, however, inequalities exist, for the efforts women put into the human reproduction process have not been taken into consideration. It is suggested that the government and the policy-making bodies should recognize this reality and take into account the special situation faced by professional women.

In China, women usually enjoy eight weeks paid leave for their parturition and are given a certain amount of time for breast-feeding every day following maternity leave. They also receive a sum of money for their observance of the one child policy. However, these practices are far from sufficient to resolve all the practical difficulties confronting women. It is suggested that the following measures be considered.

First, from the seventh month of pregnancy until the child is three years old, professional women should enjoy the right of staying away from their posts in order to fully concentrate on raising the child. The practice of three years' leave following childbirth is not only necessary for the health of women, but also beneficial for children, the family and the society. If three years is considered too long, women could be given what might be called the "child-raising leave" ranging from half a year, one year or three years, depending on the practical situation. Or mothers whose children are under three years could be granted a special child-raising leave, in addition to official holidays. During the special leave, the proportion of salary they might receive would depend on the length of the leave.

Second, in order to alleviate economic difficulties associated with raising children, the provision of a certain amount of money in the form of a child-rearing allowance for mothers, in addition to subsidies for following the one-child policy, are recommended. Under the present salary system in China, an ordinary professional usually receives a lower salary than a manual labourer of the same age.

Yet, it is the professional women who badly need to solve their financial difficulties to free themselves for study and work. The provision of a child-rearing allowance would be a recognition of the contribution that women make to society. Women have every reason to ask the society to share the responsibility.

Third, considering the practical difficulties faced by female professionals, it is suggested that the society should give more consideration to guaranteeing their rights to employment, promotion, equal salary and other matters. Only in so doing can true equality between men and women be assured.

Fourth, the retirement age of females should be extended. After 50 years of age women's family responsibilities are reduced and they can devote more time to careers. But under the present labour system in China, females have to retire at 55 years of age, five years earlier than men. After 50, children have grown-up and there is less housework and this can be a period of productivity and fulfilment. Thus it is recommended that males and females retire at the same age for the benefit of both the individuals and the society. The change would allow professional women to extend their contribution to national development and make-up the time consumed by child-rearing and housework. All of the teachers, male and female, interviewed in our survey expressed their hope that the retirement age for females would be extended.

Fifth, higher education institutions as well as specific courses should be established to promote the overall development of women. Because of the influence of tradition over thousands of years, both the society and the family tend to provide males with greater freedom, while limiting the social and educational prospects of females. People tend to be critical of women who appear somewhat liberal, energetic and sociable, and refer to them as 'boyish', 'not gentle', 'crazy girls', and so on. Such attitudes tend to deprive females of the chance to bring into play their full range of talents and abilities. Prejudice and other factors which hinder the full intellectual development of females should be removed from society. Some female schools at secondary level should be established so that females can receive a better education and develop their special talents, and, where conditions permit, female institutes of higher learning should be created. In the past, there were several famous female colleges which turned out quite a number of female intellectuals. Now the Huanam Girls' Institute in Fujian province, whose establishment was approved by the provincial government, is the first private female institute in the People's Republic of China. The institute, initiated by retired teachers and administrative staff, was created to meet the requirements of economic development of Fujian province in the context of reform by turning out students who are well-developed in morality, intelligence, physical condition and aesthetic ideas. This is a new type of school which caters for females who have not only a good command of professional and theoretical knowledge, but also have the capability of doing various economic work. So far, the institute offers four courses: functional English for special zones, child education and consultation, costume designing, and nutrition and food science. The duration of schooling is three years and students pay tuition fees themselves. Following graduation, students have to look for jobs on their own

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and only the top students receive the recommendation of the institute. The establishment of the institute and its curriculum arrangement have met the needs of provincial economic development and played an important part in raising the political and cultural level of women.

Sixth, the last remnants of feudal ideology should be replaced by an attitude of social, economic and educational equality for all citizens. The idea that "man is superior to women" constitutes the spiritual pillar of the male society, and the notion of the "three obediences and the four virtues" helps to ensure male dominance. The idea of "being inferior and weak" has prevented women from self-development and made them dependent on men. Decayed traditional feudal morality, binding women's minds like a foot-binding belt, to some extent also affects women with advanced education. The society as a whole should be mobilized to remove the remnants of feudal ideology and traditional prejudice, show respect for women, and oppose any discriminatory ideas and practices. Attention should be focused on women, particularly in terms of their rights to education and employment. At present, the most urgent problem to be solved lies in the areas of school enrolment and employment. Leaders at all levels should be aware that having children only takes up a small part of the time of a woman's working life and also recognize the socio-economic contribution of child-rearing. Child-bearing should by no means be used as an excuse to limit and deprive women of their rights to education and employment. Efforts should also be made on the part of female intellectuals themselves to further self-education and to remove the limiting effects of feudal ideology. Women should be ambitious, and have self-respect. They should also develop their talents for the greater good of the nation.

Seventh, with a view to enhancing women's education, it is proposed that schools at all levels should establish "female student instruction committees" (or "consultation centres"). These committees or centres would help women with psychological problems and other matters of daily life, assist them to further their study skills and physical health and help them to pursue either further study or employment. It has been proved that education for women's self-respect, self-support and self-confidence contributes much to their later success. For example, the teacher of the third class of the Senior Girls' School No. 3 in Shanghai attaches importance to the education of female students. She gives female students the chance to develop their inner abilities and she helps them to eliminate their feelings of inferiority by counteracting the saying of "intelligence saturation" which is deep-rooted in their minds. She also encourages female students to compete with males. As a result, 37 of the 38 students in the class joined the Youth League, and one of them even has become a party member. A total of 27 students in the class have won prizes in science and sports contests at municipal or district level. The class has been selected as the advanced unit for the past three years. All the students in the class passed the national entrance examination.

At the higher education level, women's committees should be set up within the students' committees in universities to solve the practical problems of female students. It is also recommended that women workers' departments in trade unions

be established with a view to strengthening women's education and finding solutions to the practical problems confronting them.

Eighth, women should be represented in leadership positions at all levels, particularly at the top decision-making level. In China, the number of women involved in politics is small. Women account for only 5 per cent of the political leaders at all levels. It is highly desirable to increase the representation of women in decision-making. The greater representation of women in leadership roles would help safeguard women's rights and enhance their participation in all aspects of national life.

Ninth, the key to resolving the problems facing women lies in the development of productive forces. The service industry can be further developed only after the productive forces of the society as a whole are strengthened. Similarly, the socialization of housework can be achieved only after material production is raised, social services are better developed and the price of commodities of all kinds are reduced. Only then can women be free from the heavy burden of housework. As a part of the socialization of housework, the society should develop child-care centres, not only for the benefit of women, but also the long-term goal of training socialist citizens in the 'four have's': to have socialist ideals, morality, discipline and knowledge.

Finally, there should be more research on women's issues. As mentioned in the introduction, there is a great need for more research on female participation in higher education and on other problems facing women. Due to lack of time and money, the present study has provided only a limited picture of the educational and socio-economic circumstances in which women find themselves. It is recommended that under the leadership of the State Education Commission, the State Statistics Bureau, the All-China Women's Federation, the State Science Commission, and the Research Institute of Man and Resources a special team should be formed to conduct research on women's role in society, with particular reference to their participation in higher education. The team should consist of educationalists, psychologists, sociologists, medical scientists, and experts in the field of women's science. Adequate funding should be provided. The team would aim to complete in three to five years time a nation-wide survey on women and their education. Also, as one of the priority projects of the State Scientific Research Programme, investigations could commence in selected provinces and cities in large administrative areas and in a few model universities. As part of the research process, statistical data and other information could be recorded and made available to government in order to assist policy-making.

The participation of women in higher education is a new subject covering a wide range of topics. The problems encountered by female intellectuals cannot be dealt with in isolation from the development of the whole of Chinese higher education and society. Female participation is tied to the women's liberation movement, on the one hand, and to the development of society, generally, on the other.

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Chapter Three

PARTICIPATION OF WOMEN IN HIGHER EDUCATION IN NEPAL

by

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Introduction

Nepal is a small landlocked Himalayan Kingdom lying in Southern Asia between China on the north and India on the south, encompassing an area of 147,181 square kilometres. The total land area can be roughly divided into three geographical regions: the mountains, the hill country and the plains, known as the Tarai.

The total population of Nepal is 16.5 million with an annual growth rate of 2.66 per cent. The Crude Birth Rate (CBR) and the Crude Death Rate (CDR) are 43 and 18 per thousand, respectively. Nepal has a per capita income of US\$160.00. The average annual GDP growth rate in real terms is only 3.4 per cent (World Bank, 1987). The literacy rate for the total population aged 6 years and above for 1981 was 23.3 per cent, 34 per cent for men and 12 per cent for women (CBS, 1985).

Advancement of the status of women in Nepal is still far from satisfactory. The participation of women in education, including higher education, is low. Few females participate in decision-making and management in higher education. Although the number of women participating in public life has been increasing, it is only occurring in areas of traditional female employment and at the lower levels of the occupational ladder. Various studies and surveys explain gender inequalities in terms of lack of educational opportunities and socio-cultural values, norms and attitudes.

Women form almost one half (48.7 per cent) of the total population of Nepal. Thus it is imperative that they be involved in national decision-making structures. Participation of women in decision-making and management can only be accomplished if a greater number of women develop their intellectual capabilities through attainment of higher educational qualifications.

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Methodology

This study of female participation in higher education in Nepal was conducted on both the macro and micro levels. The macro level study deals with secondary data from Tribhuvan University (TU). The micro level study deals with primary data obtained from school students (female), campus students, university women alumni, campus teachers and researchers of Tribhuvan University, and administrators and policy-makers of Tribhuvan University and government.

Macro level study. The main purpose of the macro level study was to explore the status of women as students, teachers, researchers and administrators in higher education in 1975, 1980 and 1985 by sex, grade (level of education) and faculty.

Data were made available from official records of the Planning Division, TU. Data for teachers, researchers and administrators for 1980 and 1985 (and to some extent for 1975) by sex, qualification and rank, were made available from the Budget Section of the Financial Administration Division of TU. For private campus students, teachers and administrators, primary data for 1980 and 1985 were collected through questionnaires.

Information was obtained mainly from teachers, researchers and administrators, regarding their qualifications, rank and sex, and from students with regard to fields of study and sex. Out of the 69 TU campuses, a few could not be included in the 1980 and 1985 figures due to lack of necessary information. Insufficient data for 1975 concerning sex, qualifications and rank of teachers, researchers, administrators and students made it impossible to include statistics from that year in the study.

Micro level study. The main purpose of the micro level study was to conduct an in-depth empirical investigation of the participation of women in higher education. Information was collected with regard to: selection of subject area, educational aspirations, the relationship between socio-economic background and choice of subject, reasons for pursuing higher education, and factors responsible for lower participation. The study forms the basis for suggestions on how to increase female participation in higher education.

A total of 301 people were included in this study which represented a total response rate of 64 per cent. They were grouped into five categories: school students, campus students, university women alumni, campus teachers and researchers, and administrators and policy-makers (Table 3.1). Males (campus students, campus teachers and administrators and policy-makers) were included in the sample in order to ascertain their views about the comparatively low participation of women in higher education.

Ninety-six female students from eleven schools were included in the study. The response rate was 80 per cent. Three schools each of different standard from the Bhaktapur, Kathmandu and Lalitpur districts and one each from the village schools of Palpa (western hill) and Dhanusha district (eastern Tarai) were selected. Higher, medium and lower levels of school have been represented from Bhaktapur,

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Kathmandu and Lalitpur districts to make the study more representative at the national level. The main reasons for including school students were to ascertain their aspirations for higher education, the subject areas they might pursue, and their perception of problems relating to the participation of women in higher education.

Table 3.1 Types of subjects in the sample

Category of Subjects	Number Sampled			Response Rate					
	Female No.	Male No.	Total No.	Female No.	%	Male No.	%	Total No.	%
School students	120	-	120	96	80.0	-	-	96	80.0
Campus students	140	35	175	95	67.9	27	77.1	122	69.7
Women alumni	50	-	50	18	36.0	-	-	18	36.0
Campus teachers & researchers	50	25	75	39	78.0	9	36.0	48	64.0
Administrators & policy-makers	25	25	50	8	32.0	9	36.0	17	34.0
Total	385	85	470	256	66.5	45	53.0	301	64.0

The campus students represented seven campuses. In order to represent different faculties of TU, one campus from each of the ten institutes was selected for study. Unfortunately, the Institute of Agriculture and Animal Science did not respond and two institutes, Forestry and Sanskrit, responded very late. These three institutes had to be excluded from the study. A high percentage of masters level students was represented among the campus student. A total of 122 responses, 95 females and 27 males, were received.

Altogether, 18 university women alumni were included in the sample. They were questioned about the usefulness of their degrees, their desire to pursue higher education further, their employment status and satisfaction with their jobs, their perception of problems associated with participation of women in higher education and their suggestions for improving female participation in higher education.

Only 48 university teachers and researchers from different faculties and campuses were sampled. The 39 female campus teachers and researchers were members of the TU staff from seven different institutes. Since they were directly involved in higher education, it was believed that their responses would reveal important factors impeding increased participation of women in higher education. Nine male teachers were also included so as to know their views about the participation of women in higher education.

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The sample also included persons involved in policy-making bodies and administration. Altogether 17 persons out of 50, eight females and nine males, responded to the questionnaire. The group was composed of persons from the Minister of State to Under Secretary level, representing a wide variety of fields. These people were questioned about present and future policies designed to increase female participation in higher education.

Data collection tools. The main tool used for data collection in the micro level study was questionnaires. Altogether, five sets of questionnaires were developed.

Four procedures were used to collect data and to distribute questionnaires. The first was the collection of data from students assembled in classrooms. Second, questionnaires were sent through the mail, along with stamped self-addressed return envelopes in order to facilitate the return of the questionnaires. The third procedure was the direct distribution of questionnaires to the respondents and their collection at some later date by the researchers. The fourth procedure was telephone interviews and personal visits. No inferential statistical method other than simple cross-tabulation was used to analyse the data.

A note on terminology. In Nepal, higher education is the level of education after secondary school leading to the first qualification and above. There are three main levels of study: *undergraduate* (below bachelor degree level of study: certificate and diploma), *graduate* (bachelor degree level of study) and *post-graduate* (masters degree and above level of study). Hereafter in this report on Nepal, undergraduate level of study will be referred to as "certificate level", graduate level of study will be referred to as "bachelor level", and "post-graduate" will be referred to masters degree and above.

Background

Higher education for women started late in Nepal. It was only in 1952 that a girls' college was established. Although there has been considerable progress, women's education has not yet achieved the desired momentum. One of the various factors impeding women's education has been inadequate educational planning and its linkage with national development.

The linking of education to national development is a recent phenomenon in Nepal. Since the creation of "a modern type" school (Durbar School) in 1859, education has remained largely exclusive in nature and its spread localized and extremely limited.

With the advent of a democratic system of government the educational sector began to expand. But this rapid and largely unplanned educational expansion resulted in the production of an educated cadre oriented mainly to white collar jobs. The educated people seemed not only temperamentally alienated from the majority of the people but also proved to be lacking in essential skills and competencies required by a developing country. This was one consequence of an

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education system imported from outside, leading to a situation of educated unemployment, on the one hand, and lack of appropriately trained manpower for development, on the other. The educated elite usually felt it derogatory to do any manual work. The educated people competed with one another for clerical and sedentary jobs in urban areas, creating a heavy concentration of educated people in the cities.

In a predominantly rural country like Nepal the importance of educational expansion lies in providing meaningful education to the rural population. Development needs to take place at the village level. The socio-economic realities of village life demand a school curriculum based on principles of relevance and effectiveness. Also, there is a need for appropriate non-formal education for the vast majority of illiterate adults.

The existing curriculum does not seem to fulfil the educational needs of the rural people. Unless rural women are actively involved in home-based improvement schemes, innovations through educational development remain a dream. There must be a greater choice of subjects of a vocational type which will attract girls into education as well as allow them to be useful in their homes and in the villages, generally.

Analysis of the progress of women's participation in the higher education system of Nepal

In this chapter the extent of women's participation and involvement in higher education is analysed in terms of student enrolment and staffing patterns. The spatial distribution of female enrolment is also presented, depicting the various stages of female participation in various regions of the country. The analysis also examines the trends which have developed over a five year period: 1980-1985.

Student participation

Table 3.2 presents enrolment data for 1980 and 1985 by level of education and type of institution/faculty. In 1980, out of a total of 33,952 students enrolled in the ten types of institutions, 6,641 (19.6 per cent) were females. The institutions/faculties in which the females comprised at least 20 per cent of the total enrolment were: the Institute of Medicine, the Faculty of Education, and the Faculty of Humanities and Social Sciences (abbreviated as "Humanities"). In the Institute of Forestry there were no females at all in 1980 and in the technical institutes of Engineering, and Agriculture and Animal Science, females enrolled were nominal. Career-oriented studies, such as Science and Technology, Law, and Management, attracted a small proportion of females. The relatively high proportion of females in the field of Medicine (41 per cent) is mainly due to the Nursing Programme offered exclusively to females after the School Leaving Certificate (SLC).

The scenario observed in 1980 had not changed significantly by 1985, although in nine out of ten institutes/faculties the proportion of female enrolment had increased (except for education, where the proportion declined slightly). Whatever improvements were achieved during 1980-1985, they were not substantial or pervasive throughout all institutions and levels.

Table 3.2 Female participation in higher education in Nepal: 1980 and 1985

Institution/ Faculty	1980								1985							
	Certificate No.	%*	Bachelor No.	%	Postgraduate No.	%	Total No.	%	Certificate No.	%	Bachelor No.	%	Postgraduate No.	%	Total No.	%
TECHNICAL																
Engineering	36	2.5	-	-	-	-	36	2.4	120	5.9	-	-	-	-	120	5.5
Agriculture and Animal Science	1	0.1	-	-	-	-	1	0.1	-	-	7	1.9	-	-	7	0.6
Medicine	479	42.1	20	24.7	-	-	499	41.0	592	50.4	86	43.9	5	35.7	683	49.3
Forestry	-	-	-	-	-	-	-	-	29	8.0	-	-	-	-	29	5.9
Total Technical	516	13.8	20	6.7	-	-	536	13.3	741	17.0	93	10.8	5	35.7	839	16.0
GENERAL																
Science and Technology	375	10.5	47	19.3	74	36.8	496	12.3	835	13.5	178	21.2	69	26.3	1,082	4.8
Law	57	3.7	45	8.9	-	-	102	4.9	290	7.4	36	3.7	-	-	326	6.6
Management	544	9.9	118	10.5	29	5.1	691	9.6	1,326	15.3	243	11.5	119	9.1	1,688	14.0
Education	634	28.8	193	35.9	24	28.9	851	30.1	712	30.1	202	18.7	35	18.9	949	26.1
Humanities	3,017	29.8	675	29.6	260	29.4	3,952	29.7	6,172	39.1	1,176	31.1	379	29.1	7,727	37.0
Sanskrit	9	4.1	3	1.9	1	0.8	13	2.6	14	7.3	2	3.9	2	2.2	18	5.4
Total General	4,636	20.0	1,081	22.3	388	20.9	6,105	20.4	9,349	25.2	1,837	20.8	604	19.2	11,790	24.0
GRAND TOTAL	5,152	19.1	1,101	21.4	776	20.9	6,641	19.6	10,090	24.3	1,930	19.9	609	19.2	12,629	23.2

*That is, as a percentage of total enrolment

Source: Tribhuvan University, Planning Division

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The distribution of enrolment of females in 1980 and 1985 shows that female students were concentrated in the General Faculties, leaving a small proportion in the Technical Institutes (Table 3.3). The large gap in female enrolment between the Technical Institutes and General Faculties may be due to the nature of the courses, or due to social/cultural factors affecting female career choice.

Table 3.3 Enrolment of females in technical institutes and general faculties: 1980 and 1985

	1980		1985	
	No.	%	No.	%
Certificate				
Technical institutes	516	10.00	741	7.4
General faculties	5,149	90.00	9,349	92.6
Bachelor				
Technical institutes	20	1.8	93	4.8
General faculties	1,081	98.2	1,837	95.2
Postgraduate				
Technical institutes	0	0	5	0.8
General faculties	388	100.00	604	99.2
Total				
Technical institutes	536	8.1	839	6.6
General faculties	6,105	91.9	11,790	93.4

Source: Tribhuvan University, Planning Division

The percentage distribution of females by level of study shows that female enrolment in higher education in Technical Institutes is concentrated at the certificate¹ level (Table 3.4). A slightly higher percentage of females study at the upper levels in the General Faculties. The level-wise distribution of enrolment that was observed in 1980 had, however, improved slightly in 1985 in the case of Technical Institutes, while in the case of General Faculties, the situation deteriorated slightly. Such trends deserve close monitoring.

An examination of the annual rate of growth in enrolment in higher education between 1980 and 1985 by gender further demonstrates the discrepancy in female/male participation rates (Table 3.5). It is seen that the growth rates of enrolment of females in the Technical Institutes were higher than those of the males at both the certificate and bachelor levels. But in the General Faculties the growth rate of female enrolment surpassed that of male enrolment only at the certificate level. With regard to total enrolments, the females exceeded the males in annual growth rate in enrolment (13.7 per cent versus 8.8 per cent). However, this phenomenon was not apparent throughout all levels.

1. That is, below bachelor degree level.

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Table 3.4 Distribution of female students by level of study: 1980 and 1985

	1980						1985					
	Certificate		Bachelor		Post-graduate		Certificate		Bachelor		Post-graduate	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Technical institutes	516	96.3	20	3.7	-	-	741	88.3	93	11.1	5	0.6
General faculties	4636	75.9	1081	17.7	388	6.4	9349	79.3	1837	15.6	604	5.1

Source: Tribhuvan University, Planning Division

Table 3.5 Annual enrolment growth rates in higher education between 1980 and 1985

Level	Technical Institutes		General Faculties		Total Tech. + General	
	Male	Female	Male	Female	Male	Female
Certificate	2.3	7.5	8.4	15.1	7.6	14.4
Bachelor	22.4	36.0	134.2	11.2	13.9	11.9
Postgraduate	-	-	11.6	9.3	11.7	9.4
Total	4.6	9.4	8.8	14.1	8.8	13.7

Source: Tribhuvan University, Planning Division

Formula applied:

$$r = \frac{P_n - P_o}{P_o} \times 100$$

where r = annual growth rate
 P_n = 1985 enrolment figure
 P_o = 1980 enrolment figure
 n = 5 years

Given the low enrolment of females in absolute terms, the above discrepancy in annual growth rates in favour of the females may be attributed, in most cases, to an "initial growth spurt" rather than to systematic improvement of female participation in higher education. The females' share of total enrolment in 1980 and 1985 do not indicate a steep rise in their overall rates of participation.

Regional enrolment pattern

For administrative purposes, the country is divided into five development regions: Eastern (EDR), Central (CDR), Western (WDR), Mid-Western (MWDR) and Far Western (FWDR); and there are three geographic regions: the Mountains, the Hills and the Tarai. The following regional characteristics with regard to female enrolment in higher education were observed (Table 3.6):

From Table 3.6 it can be concluded that:

- a) Female enrolment as a percentage of total regional enrolment was small throughout all regions, administrative and geographic.
- b) The number of females as a percentage of total regional enrolment was highest in the CDR where the capital is located (21.6 per cent in 1980 and 26.1 per cent in 1985), and lowest in the FWDR.
- c) There were no facilities for post-graduate level study in MWDR and FWDR till after 1985.
- d) In the 16 districts covered by the Mountain Region there were no facilities for higher education till after 1985.
- e) In the 39 districts covered by the Hill Country the proportion of females to total enrolment was nearly the same at each level of study in 1980, and the situation changed only marginally in 1985, with slightly lower proportions at the upper levels.
- f) In the 20 districts covered by the Tarai there were educational facilities only for the certificate level of study in 1980; this situation improved in 1985 with the extension of facilities to the bachelor level of study.
- g) In all regions (development and geographic), except in the EDR, the overall participation rates of females improved between 1980 and 1985; in the EDR there was a slight decline.

Summary. The major observations about participation of women in higher education based on available data can be summarized as follows:

- a) Female enrolment in higher education increased from 19.6 per cent of total enrolment in 1980 to 23.2 per cent in 1985. However, only in three institutions in 1980 did female enrolment constitute at least 20 per cent of total enrolment, and this situation had not changed by 1985. Improvement in female participation has not been pervasive throughout all institutions and all levels of study.
- b) In 1980 female enrolment was concentrated at the pre-bachelor degree level and in the General Faculties, leaving a small share for the Technical Institutes. The 1985 statistics did not depart from this pattern.
- c) The annual growth rate of total female enrolment by level and institution during 1980-1985 was higher than that of the males, slightly higher in the General Faculties than in the Technical Institutes, and higher at the certificate level than at the upper levels. Given the overall low rates of

Table 3.6 Female participation in higher education by region: 1980 and 1985

	1980				1985			
	Certificate No.	%*	Bachelor No.	%	Postgraduate No.	%	Total No.	%
BY DEVELOPMENT REGION								
Eastern Dev. Region (EDR)	926	16.2	109	16.4	6	5.0	1,041	16.0
Central Dev. Region (CDR)	3,506	20.9	942	23.8	379	22.6	4,827	21.6
Western Dev. Region (WDR)	539	16.7	45	11.6	3	5.2	587	16.0
Mid-West Dev. Region (MWDR)	159	19.7	3	2.4	-	-	162	17.4
Far West Dev. Region (FWDR)	22	5.3	2	8.7	-	-	24	5.4
BY GEOGRAPHICAL REGION								
Mountains	-	-	-	-	-	-	-	-
Hills	4,834	20.1	1,101	21.4	388	20.9	6,223	20.0
Tarai	318	11.2	-	-	-	-	318	11.2
GRAND TOTAL	5,152	19.1	1,101	21.4	776	20.9	6,641	19.6
	10,090	24.3	1,930	19.9	609	19.2	12,629	23.2

*That is, as a percentage of total enrolment

Source: Tribhuvan University, Planning Division

The figures include only the enrolment in T.U. campuses and not those in private campuses.

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female participation in higher education, the higher annual growth rate of female enrolment seems to be due more to an "initial growth spurt of late beginners" than due to any systematic improvement in the overall pattern – an hypothesis which should be tested with longitudinal data of longer duration.

- d) The male-female discrepancy in enrolment was pervasive throughout the five development regions and the three geographic regions of the country as it was pervasive at all levels of study and in all institutions.
- e) Higher education facilities did not exist in the Mountains Region till after 1985; the Tarai only recently offered these opportunities up to the bachelor level; and opportunities for full-scale higher education existed only in a few locations in the Hills Region.

Private campus students

In addition to Tribhuvan University campuses, there have been private campuses in Nepal since 1980. In 1981, 36 private campuses were established and in 1985 the number increased to 53. There are four different faculties: Humanities, Management, Science and Law. Two levels of study are provided, i.e., proficiency certificate and bachelor degree. But the provision of post-graduate (masters) level education has not yet occurred.

In 1980-1981 the campuses operated only at the certificate level. In that year, out of a total of 5,358 certificate level private campus students, 805 (15 per cent) were female (based on information provided by 23 private campuses out of 36; faculty-wise data not available). The provision was made for bachelor degree level courses in 1985. In that year, the highest percentage of female enrolment was in certificate level Humanities and Social Science courses (25.6 per cent) and in bachelor level Management courses (19.8 per cent). In contrast, only 8.8 per cent of the females were enrolled in Law courses and 6.7 per cent were in Humanities

Table 3.7 Gender distribution of private campus students by faculty: 1985*

Faculty	Certificate			Bachelor			Total		
			%			%			%
	Total	Female		Total	Female		Total	Female	
Humanities &									
Soc. Sciences	4224	1083	25.6	451	30	6.7	4675	1113	23.8
Management	4456	405	9.1	510	101	19.8	4966	506	10.2
Science	349	43	12.3	-	-	-	349	43	12.3
Law	136	12	8.8	-	-	-	136	12	8.8
Total	9165	1543	16.8	961	131	13.6	10126	1674	16.5

* Only 42 private campuses responded out of 53

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and Social Sciences at the bachelor level (Table 3.7). Overall, the percentage of female enrolment was 16.8 per cent at the certificate level and 13.6 per cent at the bachelor degree level in 1985. No provision was made for bachelor degree level study in the Science and Law faculties.

Teachers/researchers

In 1980, of the total number of teachers (1,764) in all institutes/faculties, 336 were female constituting 19 per cent of staff (Table 3.8). The male/female split in teacher composition was almost the same in the Technical Institutes as in the General Faculties (80.8 per cent male to 18.2 per cent female in the Technical Institutes and 80.4 per cent male to 19.6 per cent female in the General Faculties) but in the Research Centres the split was larger (89.5 per cent male to 10.5 per cent female). In 1985, the differences remained more or less the same in the three types of institutions, neglecting minor increases or decreases. It is important to note the

Table 3.8 Distribution of female teachers
in Tribhuvan University: 1980 and 1985

Institution/ Faculty	1980			1985		
	Total	Female	% Female	Total	Female	% Female
TECHNICAL						
Engineering	126	9	7.1	192	14	7.3
Agriculture	9	-	-	115	4	3.5
Medicine	41	25	61.1	183	81	44.3
Forestry	11	-	-	41	2	4.9
Total	187	34	18.2	531	101	19.0
GENERAL						
Science & Tech.	240	48	20.0	535	103	19.3
Law	79	14	17.7	103	13	12.6
Management	203	24	11.8	341	34	10.0
Education	259	45	17.4	364	74	20.3
Humanities	694	163	23.5	1,266	258	20.4
Sanskrit	26	-	-	135	6	4.4
Total	1,501	294	19.6	2,744	488	17.8
RESEARCH						
Research Centres	76	8	10.5	102	11	10.8
GRAND TOTAL	1,764	336	19.0	3,377	600	17.8

Source: Tribhuvan University, Planning Division

degree to which staff in the Research Centres was male dominated, more than in the other type of institutions.

Another notable aspect about the distribution of female teachers in the University is their unequal representation in the 11 types of institutions. In 1980, the Institute of Medicine had the highest proportion of female teachers (61.1 per cent), other institutes/faculties had less than 25 per cent. In 1985, there was a sharp drop in the proportion of female teachers in the Institute of Medicine (from 61.1 per cent to 44.3 per cent) and their representation neither increased nor decreased to any pronounced extent in the other institutes/faculties. On the whole, the representation of females on the teaching staff of the university tended to decline rather than increase.

Table 3.9 illustrates the extent of upgrading in teachers' qualifications by sex. The university has been offering opportunities for teacher upgrading through various programmes, the Faculty Development Programme being the prominent one. The 1980 data show a greater percentage of male teachers holding Ph.D. degrees, the highest degree, than female teachers (2 per cent versus 0.3 per cent). The 1985 data show a greater proportion of male teachers taking the opportunity to upgrade their qualifications in terms of gaining the Ph.D. degree (from 2 per cent in 1980 to 8.8 per cent in 1985) than female teachers (from 0.3 per cent in 1980 to 2.3 per cent in 1985). In absolute figures, the number of Ph.D. holders among male teachers increased from 27 to 225 while the increase among the female teachers was from 1 to 13. This situation may indicate a problem in the selection of teachers for Ph.D. level upgrading programmes. The same trend can be detected if one considers the case of teachers with just the bachelors degree (interpreted here as under-qualified for university teaching). These teachers are employed to teach certain pre-bachelor level degree courses in some institutes/faculties such as Medicine, Law

Table 3.9 Qualification of university teachers: 1980 and 1985*

	1980						1985					
	Total		Male		Female		Total		Male		Female	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Ph.D.	28	1.7	27	2.0	1	0.3	238	7.6	225	8.8	13	2.3
Masters	1369	83.1	1088	81.9	281	88.1	2512	80.0	2033	79.1	479	83.9
Bachelors	239	14.5	204	15.3	35	11.0	365	11.6	286	11.1	79	13.8
Below bachelors	12	0.7	10	0.8	2	0.6	26	0.8	26	1.0	-	-
Total	1648	100	1329	100	319	100	3141	100	2570	100	571	100

*That is, for those teachers for whom information on qualifications was available
Source: Tribhuvan University, Planning Division

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and Education. If one compares the 1980 and 1985 compositions, it is seen that while the proportion of male under-qualified teachers decreased (from 15.3 per cent to 11.1 per cent), the proportion of such female teachers increased (from 11 per cent to 13.8 per cent). Other factors being constant, the selection of under-qualified teachers for upgrading programmes in terms of masters degrees also seems titled in favour of the male teachers.

In Table 3.10 the status distribution (academic rank) of university teachers by sex in 1980 and 1985 is presented. Taking the 1980 distributions as the base-distribution, it can be observed that a higher proportion of male teachers were promoted to professorships than female teachers (an increase from 3.9 per cent to 5.3 per cent of the total number for males as against a decrease from 3.4 per cent to 2.4 per cent for females). With regard to Readerships, the second highest rank, the differential rate of promotion of male and female teachers can be noted. There were higher proportions of female teachers with the status of Assistant Lecturer than male teachers in both years of observation. The discrepancy may not be due to any particular policy, but the issue cannot be taken lightly.

Table 3.10 Rank of university teachers: 1980 and 1985*

	1980						1985					
	Total No.	%	Male No.	%	Female No.	%	Total No.	%	Male No.	%	Female No.	%
Professor	66	3.8	55	3.9	11	3.4	154	4.8	140	5.3	14	2.4
Reader	34	2.0	31	2.2	3	0.9	181	5.6	167	6.3	14	2.4
Lecturer	756	44.0	639	45.7	117	36.7	1320	40.8	1106	41.8	214	36.3
Asst. Lect.	770	44.8	601	42.9	169	53.0	1434	44.3	1110	42.0	324	54.9
Instructor	93	5.4	74	5.3	19	6.0	145	4.5	121	4.6	24	4.0
Total	1719	100	1400	100	319	100	3234	100	2644	100	590	100

*That is, for those teachers for whom information on academic rank was available
Source: Tribhuvan University, Planning Division

Administrators/policy-makers

Table 3.11 presents the distribution by rank and sex of administrative staff of the university. In the 1980 distribution, a greater proportion of the female administrative staff occupied the status of Assistant Administrator than did the male administrative staff. The number of females occupying this position increased in 1985. The top level position of administrator was enjoyed by males in greater proportion than females in 1980. This situation improved in 1985, but nominally. In general, of the total administrative staff in the university the females comprised 15 per cent and 16 per cent and the males 84 per cent and 85 per cent in 1980 and 1985 respectively. The proportion of females employed in administrative positions is indeed lower than the overall rate of female participation in higher education generally.

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Table 3.11 Composition of administrative staff in Tribhuvan University and private campuses: 1980 and 1985

	1980						1985					
	Total		Male		Female		Total		Male		Female	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Admin- istrator	12	6.8	11	7.3	1	3.7	4	1.5	3	1.3	1	2.3
Associate admin.	-	-	-	-	-	-	2	0.7	2	0.9	-	-
Deputy admin.	29	16.4	26	17.3	3	11.1	33	12.0	32	13.9	1	2.3
Assistant admin.	136	76.8	113	75.4	23	85.2	235	85.8	195	83.9	42	95.4
Total	177	100	150	100	27	100	274	100	230	100	44	100

Source: Tribhuvan University, Planning Division

Summary

Obviously, females are under-represented in all spheres of higher education: learning, teaching, administration and higher academic rank. While the university's regulations specifically disallow sexual discrimination, the reality is such that women remain marginal participants in the activities of higher education. It will take time and effort on the part of all concerned, including females themselves, before true sexual equality is achieved.

Identification and analysis of socio-cultural factors affecting women's participation in higher education

There is a number of factors affecting women's education. These can be classified as: socio-cultural; politico-economic; ideological; legal; and infrastructural.

Socio-cultural

Nepal is a Hindu Kingdom and most of its people are either Hindus or Buddhists. Hindu religion and philosophy has always influenced the thinking, attitude, and world view of the people. The Hindu scriptures like the Vedas and Puranas advocate high moral standards and intellectual excellence for women. The Veda says, "Gods like to roam about those places where women are worshipped and respected". Women exercise a very important role in human society – as mothers, they are the shapers of the destiny of mankind and thus of the nation itself. There are instances of highly learned women even in the Vedic times.

In ancient times, high priority was given to the education of females. There were several women philosophers, writers and poets whose contributions are still highly respected (Panchayat Darpan, No. 1, 1984-1985, p. 47). But the Vedic prescription regarding moral standards, purity and intellectual excellence for women

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have come to mean different things to different interpreters of the scriptures, and with the passage of time women have been deprived of their rights to education and intellectual freedom. In the zeal to preserve chastity, girls were given away in marriage at 72 months, or at the latest before they reached puberty. One reason for early marriage of girls was that parents regarded them as liabilities. They were seen as becoming some other person's property upon marriage. Consequently, parents felt that investment in their female children would be unproductive, yielding no returns. This attitude still prevails among several communities. Marriage of daughters, not their education, is still the first priority, even amongst some well-to-do and educated parents. The reason being that if daughters are not married at a proper age it is difficult to arrange marriage, subjecting parents to unwanted social criticism.

Also, there is an economic and cultural preference for the male child. The economic rationale is that it is the son, not the daughter, who looks after the parents in their old age. Sons provide economic security. The cultural rationalization, supported also by religion, is that a son is required to perform the last rites for parents when they are dead; parents who do not get these ritual services for want of a son do not receive salvation. Even well-to-do and educated families give preferential treatment to their sons over their daughters; the extent of this treatment may vary from family to family, but it is there, right from the start of childhood.

Nepalese women find themselves inextricably bound by the webs of social bondage. There is a distinction between male bondage and female bondage in Nepal. Male bondage relates to caste and economic factors, but female bondage is all-pervasive. The degree of mobility which men enjoy and the opportunities that they can exploit gradually releases them from the bondage of tradition. But this is not so for women. Following are five major ways in which the role of women is restricted in Nepalese society (Sharma, 1985: 81-82):

1. Women are restricted by the non-reciprocal form of high moral standards, chiefly related to chastity before and after marriage. The worst part of this tradition is the women's acceptance of it as a divine ordination leading thus to a fatalism difficult to overcome.
2. Marriage itself is an institutionalized form of bondage, for the husband has to be treated as a superordinate person at par with God who should be worshipped here and now as well as in the afterlife.
3. The inheritance law makes the male heir of the family, the legal and technical owner of wealth. Women are excluded from economic issues and decisions. A daughter can claim her right to a share of parental property only if she remains a spinster throughout life. The absence of economic power keeps women dependent on men.
4. The attitude that a male child is necessary to carry on the family tree helps perpetuate the low-esteem accorded to females. It is also a source of several other problems associated with gender discrimination.

5. In Nepal, the extended family system, with even three generations of people living together, prevails. The proverbial mother-in-law/daughter-in-law syndrome is common in the extended family system. Until the daughter-in-law has a strong foot in the family, the mother-in-law engages in "emotional ragging" and the daughter-in-law must wait until she herself becomes a mother-in-law to pass on revenge on the new daughter-in-law (Sharma, 1985: 84).

In sum, the idealized status of women in society is in sharp contrast to the reality of the situation, leading to contradictions. Socio-cultural prejudices against women are not readily publicized, which inevitably helps to undermine female education. The average woman is interlocked within a chain of superstitions and exploitation (Panchayat Darpan, 1985: 86).

Politico-economic

In Nepal, economic under-development and high rates of illiteracy (76 per cent), hinder the development of social, educational and political consciousness. As of 1987, there were only five women members out of 145 legislators in the National Panchayat. Female participation in political as well as administrative affairs is marginal, with very few women employed at decision-making levels in the government or in the organized sectors of the economy. Acknowledgement of women's contributions to the national economy is limited and the majority of them are left out of the labour force statistics. Of those recorded as economically active, only 36.5 per cent are engaged in professions other than agriculture. Moreover, even this minority is concentrated in low-paid and low-status jobs. In manufacturing and construction, there are no skilled female workers. The educational attainment of the labour force in general and of the female labour force in particular is very low. In 1971 only 1.04 per cent of the female labour force had completed at least primary schooling compared to 8.3 per cent of the male work force (Acharya, 1979).

Economically, women are dependent upon men. The majority of women are unpaid workers in agrarian families. Though rural women are heavily engaged in agriculture, most of them do not own land legally. Women become landowners when they become widows and when their husbands' land is transferred in their names, or when they get patrimonial property if they remain unmarried beyond the age of 35 years. But the fact remains that most rural women are economically dependent on males.

It is estimated that 46 per cent of the population is economically active, of which 30 per cent of males and 16 per cent of females were gainfully employed in the national economy during the decade 1971-1981. About 96 per cent of the active female labour force was involved in agriculture. This involvement was higher than for men. This is followed by professional/technical workers (0.4 per cent), clerical workers (0.1 per cent), sales workers (0.5 per cent), service workers (0.1 per cent), production/labour workers (1.7 per cent), occupation not stated (0.9 per cent) and a negligible percentage of women are involved in administrative jobs (Census, 1981).

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These figures clearly show that the vast majority of women are involved in agriculture and that few participate in managerial and administrative work. This seems to have a direct relationship with the level of education expected of Nepalese women. The rate of literacy is higher in the urban than in the rural areas, which form the backbone of the national economy. Poverty is one of the factors that impedes women's education, whether at school or at higher levels.

Ideological

Ignorance, superstition and enslavement to outdated customs and beliefs are the hallmarks of underdevelopment. Certain ideological beliefs and practices sanction sex discrimination. A male child is considered to be a must in order to carry on the family tree, a belief which gives rise to several associated problems. Daughters are mostly regarded as a burden on the family. The low value accorded to daughters is partly due to the high value given to sons and also due to the economic pressure exerted upon the daughters' parents by the dowry system where it occurs. Daughters are to be married off as soon as possible, for unmarried girls often become the brunt of social gossip and scandal. In many communities, women are treated as impure or as untouchable during their monthly menstruation period, and in Jumla they are forced to spend this period outside their home. As one commentary puts it (HMG/N, 1985, Panchayat Darpan, No. 1, p. 85):

All the drudgeries of domestic life are to be shouldered by the woman. She is the cook, the grinder, the water carrier, fuel or wood carrier, the washerwoman and utensil cleaner. On top of all that she is a cattle tender and a farm worker. All these would pass on as normal because she does them without wail.

The lifestyle imposed on females is such that in most parts of rural Nepal, engagement in household chores is 'naturally' expected of daughters, even at the expense of their schooling. Even those who are fortunate enough to start school often have to leave it abruptly, especially with the onset of puberty. Because girls are generally denied access to higher level studies, they cannot develop personalities which might allow them to resist some of the bondage imposed upon them. Those women included in the statistics indicating an increase in the number of female students in higher education represent mostly those from the urban areas or from the affluent families of rural areas who seek social mobility through education. The lot of the majority of girls in rural areas has not significantly improved.

Factors affecting the social position of women can be summarized as follows:

- a) lack of family planning in the expectation of having a male child;
- b) lack of a nuclear family system;
- c) early marriage;
- d) dowry system;
- e) social prejudice against spinsterhood, resulting in pressure to marry whenever the parents want, even at the expense of education;

- f) social taboos on normal life and work during menstruation; and
- g) social sanction of male domination over females.

All these factors intersect so as to produce great impediments to women's active participation in education.

Legal

The Constitution of Nepal (1959) outlaws discrimination against any citizen in the application of general law as well as in respect to appointments to the government service or any other public service on grounds of religion, race, sex or caste. All are equal before the law and all are entitled to receive equal protection under the law. Even before the Constitution was ratified, Nepalese women enjoyed near legal equality and they did not have to wage a protracted struggle to obtain it. At present, women are entitled to vote at the age of 21 years and are eligible to stand for elected office.

The Nepalese legal system gives the impression that there is nothing wrong in the state of affairs pertaining to women. But the reality is different. In practice, women fall far behind men. Several aspects of the male/female relationship are governed more by tradition, culture and the dictates of religious scriptures than by codified laws. Many adverse social practices, such as child marriage, untouchability, polygamy, incompatible marriage and discriminatory punishment on the basis of sex, are sanctioned by tradition, culture and religious dictates. The Mulki Ain and its amendments indeed declared these practices as illegal. But, since a major portion of the Nepalese population is steeped in age old traditions, it is not surprising that problems still occur. Many traditional practices adversely affect the destiny of women. The egalitarian principles laid out in the Constitution and reflected in law have benefited some women, particularly those belonging to the more affluent sections of the society. But problems persist in several poor and illiterate communities across the country. The further one goes into the hinterland, away from the urban centres where the banners of equality are held high by female activists, the more apparent becomes the adverse plight of women. The law is a necessary mechanism for bringing about equality, but it will not be totally successful until people change their attitudes, values and traditional opinions of women.

There are several constraints to promoting higher education for women. Some of the major constraints are identified in an article by Carol Cooper (1984). Although her article was specifically written about the problems of recruiting female candidates for a programme at the Institute of Renewable Natural Resources, the analysis carried out in the article is also valid in the context of the present study. Her observations are:

1. Although 55 per cent of the agricultural work is done by women, programmes designed to increase their productivity have been neglected.
2. A very tiny proportion (0.88 per cent) of the female labour force aged 10 years and above had a secondary level education in 1971 so that the number of females eligible for admission into many gainful training activities training activities was extremely limited. This situation has not changed much in 1987.

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3. Irrespective of the wealth of the household, the need for female child labour on the farm and in the household acts as a major factor hindering the spread of female education.
4. The offer of tuition-free schooling for girls up to Grade V does not provide much incentive to parents to send their daughters to school given that survival is based on success in agriculture which, in turn, is dependent on daily labour.
5. Even if the daughters' labour is not needed at home, the cost of schooling above the free primary level -- which rises with each level of schooling -- is beyond the means of most rural parents.
6. Cultural values and priorities limit the likelihood of increasing female recruitment in post-school level training programmes for the concern for marriage of daughters overrides career building programmes.
7. Programmes of long duration may discourage young girls from joining them for they entail the risk of not finding an adequate husband when older; and parents also require assurance of their daughters' security while away from home.
8. Since much of the household chores falls on the shoulder of the daughters-in-law in extended families, it is somewhat naive to expect that their parents-in-law and husbands would approve of their leaving home for a long period of training.
9. A very important constraint to women's involvement in university training programmes might be the perceived effect of socialization into alternative value systems. Once women leave their homes for training, they may return feeling that their education qualified them for an office-based job. There is a chance that they would not want to work in the field, or may never have intended to do so.

Another observation of Cooper's (1984) which is important to note with regard to all development programmes based on education is that "education appears to be regarded as a status symbol and a requirement for marrying into a good family more often than as a stepping stone to employment".

Three observations can be made here. First, the problem of enhancing female participation in higher education is not merely a problem of higher education or even of the education sector *per se*, it must be perceived as an integral part of a much broader and more complex situation associated with national development.

Second, education is basically a cultural act. Since man is a cultural animal, any kind of education that ignores his cultural roots is doomed to fail. This applies in particular to the kind of education being imparted to females. It seems that the present education system and the way it is implemented does not serve the interests of the dominate culture, hence the reluctance of many parents to educate their children, especially their daughters. Poverty alone is not the sole cause for the low educational development of the female population.

Third, a renaissance in education also requires cultural change. The prospect of enhancing female participation in higher education depends on the extent and quality of changes taking place in other parts of the society. Education and culture must interact in order to produce the desired outcome. At present, education in Nepal is changing rapidly while changes in the culture have not kept pace. Education insofar as it is associated with cultural change *vis a vis* entrenched traditional attitudes is indeed a complex matter.

Infrastructure

Historically, education was regarded as an esoteric exercise, not intended for the general masses. The whole purpose as well as the content of education was inseparable from religion. It was only in 1853 that a school of a "modern type" was established in Nepal.

In 1919 a college was set up with just two students. The student body of the college even up to 1950 was only 250, all being boys. A girls' college was set up only in 1952. Because no strong efforts were made at the national level to extend educational opportunities, there was little awareness among the people as to the value of education. In the late 1940s an unprecedented wave of interest in education swept the country. The first ever girls' high school was established in that decade, and a number of schools were set up in different places on the initiative of the people. Then came the political change of 1951 marking a new era of democracy and the restoration of freedom and human rights. Never before had public awakening reached such a height as in those initial years. The educational expansion that began in the late 1940s commenced to gain considerable momentum with this new crescendo of national consciousness (Centre for Educational Research Innovation and Development (CERID), 1980: 181-182). The educational system in Nepal prior to the year 1950 was at a very rudimentary stage consisting of only two colleges, 11 high schools and 321 primary schools in the whole country. More than 98 per cent of the people were illiterate and education among women was almost nil. With the coming of democracy in 1951, there was tremendous progress in the area of education so that by 1970 the number of colleges, high schools and primary schools rose to 33, 156 and 4,001 respectively. However, educational development during the period 1951-1970 was taking place in an unplanned way and was not linked with the overall development efforts of the country (CERID, 1980).

Although it is nearly 40 years since women became involved with higher education, the number of educated women is very low. Although legally school admission is not discriminatory, the enrolment of girls is lower than that of boys. The male/female discrepancies in enrolment, and the regional profiles on sex differences in school enrolment are highlighted in the following tables.

In Table 3.12 the school level enrolment for 1985 by sex at each grade level is presented. The table shows that the initial differences between the sexes enlarges at each successive upper grade level. In grade one, the difference was 37.6 per cent (68.8 per cent male minus 31.2 per cent female), but in grade 10 the

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difference rose to 55 per cent. Difference in gender participation in education exists right from the start and goes on increasing at each successive grade level.

Table 3.12 Percentage distribution of male and female school grade enrolment: 1985

Grade	Male Per cent of Enrolment	Female Per cent of Enrolment
1	68.8	31.2
2	70.1	29.9
3	70.7	29.3
4	72.1	27.9
5	71.7	28.3
6	73.9	26.1
7	74.6	25.4
8	74.2	25.8
9	76.5	23.5
10	77.5	22.5

Source: Ministry of Education and Culture, unpublished data, 1985

Total enrolments grades 1 - 10 = 2,308,919 (Male = 1,646,458; Female = 662,460)

Table 3.13 shows Nepal's profile in terms of its ability to enrol the age-group of children in primary, lower secondary and secondary school.

Table 3.13 Age-group participation (in percentages) in the schooling process: 1971 and 1985

Age-group:	Primary (6 - 10)		Lower Secondary (11 - 12)		Secondary (13 - 15)	
	Male	Female	Male	Female	Male	Female
1971*	40.9	8.6	15.9	3.6	12.8	3.2
1985**	104.8	47.6	45.8	18.7	36.7	12.5
% Growth rate in age-group	6.9	13.0	7.8	12.5	7.8	10.2

Based on a) Educational Statistical Data, 1972 and 1985;

b) Projections of age-group populations based on 1971 and 1981 Population Census Reports under the following assumptions:

- i) that the population growth rate is 2.66 per cent per annum; and
- ii) the the male/female school-age population that was obtained in 1981 existed also in 1985.

*The 1971 estimates on age-group enrolment are somewhat inflated because the population data was for 1971 while the enrolment data was for 1972 (data for 1971 did not exist).

**The figures are inflated to some extent for reasons of not discounting students who are over-aged for a particular level (discounting is not possible at this stage).

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From Table 3.13 the following key points can be noted:

- The participation rates of females at all levels and years were much lower than those of the males.
- The male/female discrepancies observed in 1971 at all levels widened further in 1985.
- The much lower rate of participation of females has remained intact in spite of the higher growth rate in age-group enrolment at all levels in favour of the female against the male. Female growth rates were higher than that of males at all levels due mainly to the very low starting rates of females and initial growth momentum.
- Universal primary education for females may not be attained by the government's target date of the year 2000 A.D.

Table 3.14 shows wide variations in male/female enrolment at all levels in all parts of the country. The two regions, the mid-western and the far-western, are at the lower end of the continuum and far behind the national average.

Table 3.14 Age-group participation (in percentages) in education by gender and region: 1985*

Age-group: Development Region	Primary (6 - 10)		Lower Secondary (11 - 12)		Secondary (13 - 15)	
	Male	Female	Male	Female	Male	Female
Eastern	100.4	55.9	48.8	23.2	40.9	15.9
Central	98.1	44.1	46.7	20.5	40.4	14.6
Western	126.4	66.6	52.4	22.9	39.3	13.6
Mid-western	98.4	28.0	33.1	8.5	24.8	5.8
Far-western	101.3	21.0	37.9	5.6	23.4	2.7
Total	104.8	47.6	45.8	18.7	36.7	12.5

*Based on the same assumptions as Table 13. The figures are inflated to some extent for reasons of not discounting students who are over-aged for a particular level (discounting is not possible at this stage).

The above data is not encouraging. The discrepancy between male/female enrolment in education starts at the primary level and the gap continues to widen with each level of schooling; by grade 10 over three-quarters of the students are male and less than one-quarter are female. In terms of age-group participation in schooling, the gap between males and females does narrow with level of schooling. This may be due to higher retention rates among female students. Nonetheless, the statistics show that equal participation in education according to sex does not exist. It seems that the low participation rates of females in higher education is but an extension of the situation prevailing throughout the educational system.

Review of policies, programmes and strategies for the promotion of women's participation in higher education

No society has yet achieved true sexual equality. The UN declaration of 1975 as the International Women's Year and later 1975-1985 as the UN Decade of Women and Development, reflects the global concern on issues related to women's role and status in society, not only in less-developed countries but also in developed parts of the globe.

The origin of Nepal as a modern state professing and practising democracy as a form of government is fairly recent, beginning in 1951. The entire modern history of Nepal to the present day may be said to be a history of struggle within Nepalese society itself between 'traditional' and democratic norms, values, attitudes and practices. The improvement of the social position of women in this country is inextricably tied to this struggle.

In Nepal, systematic efforts for overall socio-economic development started in the mid-1950s, with the launching of the first national Development Plan in 1956. Since then six successive plans have been implemented. The earlier plans made no special efforts to raise the status of women and to increase their productivity. The Sixth Plan (1980-1985) and the Seventh Plan (1985-1990) are exemplary for their emphasis on the enhancement of women's participation in development activities. The plans reflect the growing awareness and concern regarding women's role in the development process. In fact, the formal acceptance of the policy of integrating women in the task of nation building is one of the significant achievements made by Nepal during the United Nations Decade for Women. The policy measures adopted in the Sixth Plan were related to the promotion and integration of women in various development activities, such as agriculture, nutrition, family planning and health, cottage industry and other employment generating activities.

It goes without argument that the national zeal for developing women as partners in development has been, in part, inspired by international thinking and aid. The Sixth Plan and the Seventh Plan bear the marks of international development thinking and models. The 1975 World Conference on Women's Development, which published a World Plan of Action, led to the formulation of a detailed National Plan of Action for Women's Development in Nepal. The Seventh Plan contains a separate chapter on policies and objectives for women's participation in development. With regard to policies, the Seventh Plan states its objectives as:

- a) to provide [women with] proper (suitable) opportunities for development (a reservoir of huge labour force) and make women efficient in their participation in each field of development in the country;
- b) to raise the economic and social status of women; and

The plan has enumerated the following programmes to attain these objectives:

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- a) Steps will be taken to start special programmes for girls in the educationally backward areas. Employment opportunity will be increased for skilled and trained women. Adult and informal education will be developed and expanded.
- b) In order to improve the socio-economic condition of women, family planning, maternal and child health programmes and programmes related to women's education and employment will be encouraged.
- c) Women will be encouraged to participate in the activities related to forestry, and co-operatives and training will be provided in related areas.
- d) Steps will be taken to provide better knowledge and skills and to increase better employment opportunities for women in the non-agricultural sector. Necessary basic funds will be created and marketing strategy will be developed under the co-operative schemes. The productive loan schemes for income generating activities will be extended to more districts.
- e) Proper training facilities will be extended to women engaged in governmental as well as non-governmental sectors in order to promote better participation in the policy and decision-making process.
- f) The non-governmental organizations (NGOs) will be given necessary facilities to enable them to participate in the task of developing women's organizations that have taken prime responsibility for the development of women. For example, the Nepal Women's Organization (NWO) and the Women's Service Co-ordination Committee (WSCC) will be engaged to use their infrastructure, extending from the grassroots to the national levels, in mobilizing the local Panchayats as well as other non-governmental agencies for their active participation.
- g) Proper legislation will be brought about in order to remove the obstacles, prejudices and ill-practices which hinder the development of women.

Sectoral programmes and achievements. Different government sectors at different levels have addressed several issues relating to women's development. The formulation of development programmes including those for women is being undertaken by the different ministries concerned, all under the guidance of the National Planning Commission, the leading agency for the formulation of national development plans. The highest policy-making body is the National Development Council, constituted under the Chairmanship of His Majesty the King. The Council issues directives to the National Planning Commission on fundamental objectives and policies for the socio-economic development of the country.

Some of the sectoral programmes for the development of women and the achievements made during the past decade are reviewed below.

Education. Special emphasis has been placed in the national development plans on increasing female enrolment. In pursuance of this policy, from 1971 primary education was made free with the introduction of the National Education

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System Plan (NESP). Female students in the remote districts are provided with free textbooks for Grades IV and V, and all students receive free textbooks for Grades I-III. Preference has been given to the training of women in the teacher training programmes. Girls from remote districts are recruited for primary teacher training and posted in the rural community schools on completion of their training.

Provision of scholarships for girls and cash awards and medals to schools enrolling the highest number of girls are some of the measures adopted to attract a larger number of females to school. While the boys go without hostel facilities in several districts, the NORAD project (a Norway-UNICEF-HMG project) has been constructing hostels for girls in several districts.

The provision of free primary education, free textbooks, UNICEF scholarships for girls in upgrading and teacher training programmes has definitely boosted female enrolment in the remote districts, and the presence of female teachers on the teaching staff in primary schools also has increased female enrolment at this level. All these measures have increased the expenditures on education as well as the public commitment to the education of girls, although female enrolment is not on par with male enrolment at present.

The National Planning Commission has a target of reducing the fertility rate from 6.3 per cent to 2.5 per cent by 2000 A.D. The strategies adopted are the promotion of female education and the employment of females in income generating activities, the conviction being that the higher the level of education and work efficiency the lower the fertility rate.

Non-government organizations. Since the task of integrating women in the overall process of development cannot be undertaken by government institutions alone, the help of other non-governmental organizations, such as the Women's Services Co-ordination Committee and the Nepal Women's Organization and professional clubs and associations, has been sought. These non-governmental social organizations have been playing active roles in improving the condition of Nepalese women for some time. The Nepal Women's Organization constituted in 1963 as an independent body is a pioneering socio-political institution in the non-governmental sector. It has been playing a vital role in influencing the politics and policies concerning women's development. The organization has been undertaking various activities on its own initiative with the objectives of raising the socio-political awareness of women. The organization also has been active in such major areas as literacy programmes, family planning, legal services and training programmes for income generating activities.

The Women's Services Co-ordination Committee is an integral part of the Social Services National Co-ordination Council (SSNCC), and acts as the sponsor/supporter/co-ordinator of several women's development programmes launched by local, national and international agencies. Recently, the SSNCC became a powerful force under the dynamic and dedicated patronage and leadership of Her Majesty the Queen. The WSCC has been serving as an important mechanism for the generation, co-ordination and integration of women's development activities in the

country. The identification of women's development needs, the formulation of programmes and their implementation through suitable agencies are carried out under the initiative of the WSCC. A number of clubs and welfare associations are also functioning under the umbrella of this organization. Among them the Mother's Club and Business and Professional Women's Club are actively undertaking a number of activities for the socio-economic improvement of women.

Constitutional/legal measures. The *Constitution of Nepal, 1962* has explicitly guaranteed equal rights to women with the following provisions:

- a) All citizens shall have the right to protection of the laws.
- b) No discrimination shall be made against any citizen in the application of general laws on grounds of religion, race, sex, caste, tribe or any of them.
- c) There shall be no discrimination against any citizen in respect of appointment to the government service or any other public service only on grounds of religion, race, sex, caste, tribe or any of them.

Accordingly, women have the right to vote, be members of any elected body and hold any public office and higher executive, legislative and judiciary posts.

In 1963, the sixth amendment of the *Mulki Ain* (Law of the Land) brought about a number of changes and created a judicial system which made to discrimination against anyone on grounds of caste, religion and sex. Several clauses of the amendment pertained to the promotion of the interests and social well-being of women. Several 'social evils' that subjugated women to unjust practices, such as child marriage and polygamy, were declared illegal. The amendment provided for the allocation of a share of parental property to unmarried daughters. It made the divorce laws more liberal and raised the marriageable age to 18 years for boys and to 16 years for girls. However, there is no provision either in the Constitution or the *Mulki Ain* stating that parents should not discriminate in the schooling of their children.

Research works on women and their development. In recent years, interest in research on the status and development of women in Nepal has appeared at both the national and the international levels. There are some outstanding research reports on various aspects relating to Nepalese women. The efforts of local research organizations, such as the Centre for Economic Development and Administration (CEDA), Tribhuvan University, the Integrated Development System (IDS), a private agency, the Centre for Educational Research Innovation and Development (CERID), Tribhuvan University, are significant indeed. There are several studies on female education at the school level, but as yet no studies have surfaced on the participation of women in higher education – a gap which this present study attempts to fill.

Summary. What has been done so far to promote the education of women has been limited mostly to the primary level, and nominally to the secondary level. It is difficult to accept the argument that there is equality of educational opportunities for females to carry on their studies up to the level that their interest, ability and dedication justify. To quote Her Majesty:

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Equality in society cannot be achieved either through slogans, demands, conflicts, or through wishes and blessings alone. Experience has also shown that laws and regulations are not adequate, what is needed is a climate of public opinion where feelings of equality emanate from the hearts of all (messages and speeches from Her Majesty the Queen Aishwarya, 1975:7).

In-depty empirical case studies

Institutional profiles

Institute of Forestry. The Department of Forestry started a training programme for its own workers in 1947, which led to the establishment in 1965, with the assistance of the Indian Co-operation Mission, of a training centre at Hetauda. With the introduction of the National Education System Plan (NESP), the centre was upgraded and became the Institute of Forestry within Tribhuvan University. The initial junior and senior certificate level courses offered by the Institute have been augmented by bachelor level courses. Now located at Pokhara, headquarters of the Western Development Region, the Institute of Forestry has 489 students of whom 29 are female.

Institute of Agriculture and Animal Science. The Institute of Agriculture and Animal Science, located in Rampur, Chitwan District, has been a technical institute of Tribhuvan University since 1972. Its predecessor, the School of Agriculture, was established in 1959.

The Institute produces basic and middle-level skilled manpower and conducts research on farm management and agricultural problems. The Institute also offers an extension service to semi-commercial farmers through providing short-term training courses.

In terms of formal courses, the Institute offers pre-professional agricultural courses of one year's duration to prospective Agriculture Extension Junior Technical Assistants and two year certificate and diploma courses in Agriculture. There are at present a total of 200 students, all male.

Institute of Engineering, Pulchowk Campus. The history of the Engineering Training Campus at Pulchowk, Lalitpur district, dates back to 1941 when a technical school was established. This school was upgraded to an Engineering School in 1954 and to the Nepal Engineering Institute in 1964. From 1961 to 1969, the Engineering Institute operated under the financial and technical assistance provided by India under the Colombo Plan. After 1969, the Institute focussed its attention on job-oriented training programmes under the joint co-operation of HMG/UNDP. Recently, with the co-operation of AID and the Overseas Development Ministry of the United Kingdom, a diploma course in Civil Engineering has been established.

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The Institute offers programmes at the certificate and diploma levels. Out of the 1,626 students enrolled in the Institute of Engineering, 112 are female.

Institute of Medicine, Central Campus, Maharajgunj. The Institute of Medicine began as the Civil Medical School in 1934 and through a process of amalgamation became the Health Assistant School in 1956. In 1972, the Institute was incorporated by Tribhuvan University and commenced a new course for health assistants. After 1978, MBBS and post-graduate courses were begun.

The campus, with 300 hospital beds and a hostel for 160 students, is located at Maharajgunj. Of the 148 students (including pre-medical students), 29 are female. There are 72 doctors, 25 senior teachers and 66 junior teachers.

Nepal Law Campus. The Law Campus was established in line with provisions made in the NESP. Prior to the establishment of the Law Campus, Nepal Law College (created in 1954 and a TU affiliated college since 1959), provided legal education in Nepal. The Law Campus, located at Bhrikuti Mandap, offers certificate and bachelor level courses to 2,645 students, of whom 220 are female.

Balmiki Sanskrit Campus. Sanskrit is the oldest form of education in Nepal. The first Sanskrit school was established in Kathmandu in 1875 and three Sanskrit colleges were established in 1951. Following the introduction of the NESP, the Institute of Sanskrit was established in 1973 under Tribhuvan University. Balmiki Sanskrit Campus offers courses at the certificate, bachelor and degree levels. Students are also required to study other allied subjects, such as, political science, literature, economics and Hindi. All Sanskrit students receive free education, including board and lodging. Out of the total of 73 students, two are female.

Kirtipur Central Campus (Humanities and Social Sciences). Education in the humanities and social sciences at the certificate level began with the establishment of Tri Chandra College, affiliated to Patna University in India, in 1918. With the establishment of Tribhuvan University in 1959 all the colleges came under its fold. The central campus, though originally located at Tripureshwor, was shifted to Kirtipur. It offers post-graduate programmes in humanities and social sciences, science and management to a total of 1,036,262 and 154 students respectively (a total enrolment of 1,452 based on 1985 figures). Of the total number of students enrolled in 1985, 289 (20 per cent) females were studying humanities and social sciences, 69 (4.8 per cent) were studying science, and 21 (1.4 per cent) female students were studying management.

Survey results

School student attitudes. The following discussion is based on the responses of the 76 high school female students from five districts – Kathmandu, Lalitpur, Bhaktapur, Dhanusha and Palpa. The students have either passed Grade 10 (but have not studied at the campuses) or are studying at Grade 10.

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The age of the students ranged from 13 years to 19 years and their average age was 16 years. About 60 per cent came from urban areas and 39 per cent from rural areas. The high school students came from the following ethnic groups: Brahmin (40.8 per cent), Newar (38.2 per cent), Chhetri (15.8 per cent) and unspecified (5.3 per cent). The ethnic distribution of the high school female students nearly coincided with that of the campus students in the present study (see below).

With regard to parental education, 3.9 per cent of the girls did not mention their fathers' qualification nor did 6.6 per cent mention their mothers'. The fathers' qualification was higher than that of the mothers' (Table 3.15). It is observed that no mother was qualified above masters degree level. About 50 per cent (48.7 per cent) of the mothers had no education whereas about 15 per cent of the fathers were illiterate.

Table 3.15 Parents' level of education

	Illiterate	Under SLC	SLC	Certificate	Bachelor	Master	Above Master	Not Stated	Total
Father	11 (14.5)	20 (26.3)	9 (11.8)	6 (7.9)	7 (9.2)	13 (17.1)	7 (9.2)	3 (3.9)	76 (100)
Mother	37 (48.7)	17 (22.4)	4 (5.3)	5 (6.6)	5 (6.6)	3 (3.9)	0 (0.0)	5 (6.6)	76 (100)

Figures in parenthesis are percentages.

With regard to income, the largest percentage of parents (31.6 per cent) fell within the income bracket of Rs. 10,000 to Rs. 20,000. Only 4 per cent of parents were within the Rs. 30,000 to Rs. 40,000 range. Sixteen per cent of them had the highest level of income, that is above Rs. 40,000.

With regard to occupation, the largest percentage of parents (34.2 per cent) were in service and the lowest (2.6 per cent) were engaged in industry (Table 3.16). Almost one-fourth of them (24.4 per cent) were agriculturists, while about 28 per cent of parents' occupations were not stated. The comparison between fathers' and mothers' occupations indicates that a greater number (31.6 per cent) of mothers were engaged in agriculture where higher education is generally not required. About half of the students did not state their mothers' occupation. Most probably they were housewives.

The average number of children per family was 4.7 persons. Their qualifications ranged from under SLC to above masters level (Table 3.17). According to the responding school girls, the highest percentage (60.8 per cent) of their brothers and sisters were still in school, and only a few had qualifications above masters degree. Up to SLC, the percentage of girls exceeded that of boys. At the certificate level the percentage was equal (17.7 per cent). Above certificate level the number of boys exceeded the number of girls.

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Table 3.16 Distribution of parents by occupation

	Service	Industry	Business	Agri- culture	Unspe- cified	Not Stated	Total
Father	46 (60.5)	2 (2.6)	6 (7.9)	13 (17.1)	3 (3.9)	6 (7.9)	76 (100)
Mother	6 (7.9)	2 (2.6)	4 (5.3)	24 (31.6)	3 (3.9)	37 (48.7)	76 (100)
Total	52 (34.2)	4 (2.6)	10 (6.6)	37 (24.4)	6 (3.9)	43 (28.3)	152 (100)

Figures in parenthesis are percentages.

Table 3.17 Educational qualifications of high school girls' brothers and sisters

	Under SLC	SLC	Certi- ficate	Bach- lor	Master	Above Master	Total
Brothers	84 (57.1)	11 (7.5)	26 (17.7)	17 (11.6)	8 (5.4)	1 (0.7)	147 (100)
Sisters	119 (63.6)	25 (13.4)	33 (17.7)	8 (4.3)	1 (0.5)	1 (0.5)	187 (100)
Total	203 (60.8)	36 (10.8)	59 (17.7)	25 (7.5)	9 (2.7)	2 (0.6)	334 (100)

Figures in parenthesis are percentages.

When asked about their educational aspirations, all the respondents indicated a desire to gain higher qualifications (Table 3.18). About 3 per cent aspired to study only up to certificate level, whereas 60 per cent aspired for higher education (bachelor to Ph.D. level). This indicates that the majority of the school girls know the importance of higher education.

Table 3.18 Distribution of high schools girls' aspirations for higher education

	Certi- ficate	Bach- lor	Master	Ph.D.	Level Not Specified	Total
Level Aspired to	2 (2.6)	17 (22.4)	17 (22.4)	16 (21.1)	24 (31.6)	76 (100)

Figures in parenthesis are percentages.

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In terms of the field of study to which they aspired, the highest percentage (40.8 per cent) and the lowest percentage (1.3 per cent) wanted to study science and agriculture respectively (Table 3.19). Medicine was the second most popular choice for the girls. More than 13 per cent wanted to study engineering and the same proportion wished to pursue a course of study in the humanities. It is notable that the high school girls seem to be attracted to the science/technical type courses and careers.

Table 3.19 High school girls' aspired field of study

Science	Medicine	Engin- eering	Human- ities	Manage- ment	Law	Educa- tion	Agicul- culture	Total
31 (40.8)	11 (14.5)	10 (13.2)	10 (13.2)	6 (7.9)	5 (6.6)	2 (2.6)	1 (1.3)	76 (100)

Figures in parenthesis are percentages.

The high school girls gave three main reasons for wishing to pursue a particular field of study. Almost four-fifths (77.6 per cent) of the girls choose a particular area of study purely because of their personal interest. About one-tenth (10.5 per cent) were convinced that the particular area of study would help them gain employment. Only 5.3 per cent of them indicated that they chose the subject to please their parents (Table 3.20).

Almost 91 per cent of the high school girls responded that their sisters were not deprived of higher education and that the majority of their parents had realized the importance of higher education for girls. In response to the question about if their parents would permit them to pursue higher education, 72.4 per cent of the girls said that they would be allowed and 27.6 per cent did not respond. When asked what would they do if they were not permitted to pursue higher education, 21.1 per cent said they would try to convince their parents to let them pursue higher education, and 28.9 per cent were determined to study at any cost, while 14.5 per cent planned to get jobs in order to continue their study. Only 3.9 per cent expressed a desire to engage in housework.

Table 3.20 Reasons for wishing to pursue a particular field of study

Reasons	No.	%
Personal Interest	59	77.6
Ease of Employment	8	10.5
Parental Wish	4	5.3
Other	5	6.5
Total	76	100.0

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The reasons given by the respondents for pursuing higher education were varied (Table 3.21). The major reasons are: enhancement of social status (40.2 per cent), prospect for better jobs (19.6 per cent) and becoming economically self-reliant (16.7 per cent).

Table 3.21 Reasons for wishing to pursue higher education

Reasons	No.	%
Enhanced Social Status	41	40.2
Better Jobs	20	19.6
Economic self-reliance	17	16.7
Persuasion/encouragement of Family & Friends	11	10.8
Educated Family Background	6	5.9
Enhanced Marriage Prospects	1	1.0
No response/other	6	5.9
Total	102	100.0

On the whole, the response pattern of the high school girls indicated that though parents had low levels of education and occupation, both the parents and the girls were aware of the importance of higher education.

Campus student attitudes. Out of a total of 122 campus students responding to the questions in this study, 95 were females and 27 males. Among them, 47.4 per cent of the females and 29.6 per cent of the males came from the Kathmandu district. In terms of ethnic composition, students from the Newar community formed the largest group (45 per cent) followed by the Brahmin (26 per cent) and the Chhetri (14 per cent). The remaining group (15 per cent) was unspecified. In terms of religion, the majority (93.4 per cent) of the students said they were Hindus; Buddhists constituted only 6.6 per cent. The female students were concentrated in the urban areas.

All students were in their early twenties, with a mean age of 22.2 years for females and 24.5 years for males. Regarding marital status, 86.3 per cent of the females and 88.9 per cent of the males were unmarried. The slightly lower mean age of the females and the slightly higher proportion of them being married may indicate that they get married at an earlier age than the males.

The female students were asked to state the reason(s) for selecting their particular field of study. "Personal interest" in selecting the discipline was the reason stated by 57.4 per cent of the students, followed by "better job opportunity" (28.7 per cent), "raising social status" (7.9 per cent), "family members studied it" (5 per cent) and "other's recommendation" (1 per cent).

Thus it seems that personal interest and better job prospects are the main reasons why the female students choose their area of study.

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Table 3.22 Factors facilitating females' participation in higher education by guardians' occupation category and level of income

Guardians' Occupation and Income*	Facilitating Factors			Total
	Availability of Scholarship	One's Own Academic Performance	Guardians' Support and Encouragement	
SERVICE				
Below 20,000	6	-	15	21
20,000 - 30,000	-	3	7	10
30,000 - 40,000	-	1	4	5
Above 40,000	1	-	4	5
Sub Total	7	4	30	41
(% Occup. Cat.)				(47.1)
BUSINESS				
Below 20,000	-	5	3	8
20,000 - 30,000	-	-	4	4
30,000 - 40,000	1	-	1	2
Above 40,000	-	-	5	5
Sub Total	1	5	13	19
(% Occup. Cat.)				(21.8)
AGRICULTURE				
Below 20,000	5	-	7	12
20,000 - 30,000	-	-	7	7
30,000 - 40,000	1	-	3	4
Above 40,000	1	-	3	4
Sub Total	7	-	20	27
(% Occup. Cat.)				(31.0)
TOTAL	15	9	63	87
(% facilitating factor)	(17.2)	(10.3)	(72.4)	(100.0)

*In Nepali Rs.

The data revealed that the main factor facilitating the female students in pursuing higher education was their guardians' support and encouragement (Table 3.22). This was true regardless of their guardians' occupation (service, business or agriculture), and clearly implies the importance of familial values and attitudes. The highest percentage of the guardians (47 per cent) represented the service sector followed by agriculturists (31 per cent) and businessmen (21.8 per cent). In comparison to fathers, only a very few mothers were reported to have been gainfully employed and only 3.3 per cent of the mothers, compared to 41.8 per cent of fathers, held jobs in the service sector. The low involvement of the mothers in the service sector could be due to lack of education, specifically higher education.

In terms of guardians' annual income, 41 per cent of the female students and 52 per cent of the male students came from families which had annual incomes below Rs. 20,000. The majority of female students belonged to families falling in the annual income bracket of Rs. 10,000-Rs. 30,000. Most of the female students were from lower middle class families having a large number of children, 5.2 persons on average (the national average being 4.5 children per household).

When asked if any of their friends were deprived of higher education, 33.6 per cent of the female students and 59.3 per cent of the male students stated that they had such friends. The main reason given by the female students for such cases was early marriage (46 per cent), while the male students related it to economic conditions (57 per cent). Guardians' opposition to their continuing higher education was also mentioned as a problem for some girls. Another factor leading to the discontinuation of study was failure in examinations. Lack of self-confidence among the students themselves was also mentioned as a reason. Social conservatism and poor economic status of parents were identified by the respondents as the main causes that deprived females of opportunities for higher education.

When students were asked to state their career plans, about 30 per cent of the female students expressed their intention of continuing their study beyond the present level. Another 34 per cent planned to get a job. Seventeen per cent intended to get married or engage in household activities. About 18 per cent had not seriously thought about any career plan (Table 3.23).

The study revealed that the lower the level of guardians' income the greater the number of females aspiring for higher levels of study (beyond present level). This tendency was stronger in the service sector than in the agricultural sector, and stronger in the agricultural sector than in the business sector. But it should be noted that for particular occupational categories and income levels, the sample size is quite low.

About 32 per cent of the female students felt proud to be college students, 21 per cent felt that they were specifically treated both by teachers and male students, 5 per cent felt humiliated, 2 per cent felt ignored, but 28 per cent did not experience any such feelings.

Conservative social outlook (28.2 per cent), poor economic conditions (18.6 per cent), household chores (13.6 per cent), early marriage (6.4 per cent) and sexual

Table 3.23 Female students' career plans by guardians' occupation type and income level*

Career Plan	Guardians Occupation Type and Income Level																	Grand No.	Total %
	Service					Business					Agriculture								
	A*	B	C	D	Total	A	B	C	D	Total	A	B	C	D	Total				
Continue study	5	2	1	1	9	1	1	1	1	4	4	3	1	4	12	25	30.5		
Employment	6	5	2	2	15	5	2	-	1	8	3	1	1	-	5	28	34.1		
Marriage	5	-	-	1	6	-	-	-	1	1	3	2	2	-	7	14	17.0		
Don't know	4	3	1	-	8	1	1	-	2	4	2	1	-	-	3	15	18.4		
Total	20	10	4	4	38	7	4	1	5	17	12	7	4	4	27	82	100.0		

*Income level: A = below Rs. 20,000; B = Rs. 20,000 - 30,000; C = Rs. 30,000 - 40,000; D = above Rs. 40,000
Based on the responses of 82 female students.

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prejudice (8.6 per cent) were pointed out by the female students as some of the prominent factors responsible for lower participation of women in higher education. Other factors included were the perpetuation of traditional anti-feminist values and prejudices by women themselves, illiteracy among parents, low female enrolment in schools and distance between home and campus.

Suggestions made by the female students for increasing women's participation in higher education are listed in Table 3.24.

Table 3.24 Female students' suggestions for increasing women's participation in higher education

Suggestion	No.	%
(a) Increase parental awareness of the importance of education for females.	17	10.1
(b) Increase job opportunities for women.	17	10.1
(c) Discourage sexual discrimination.	21	12.4
(d) Discourage early marriage.	5	3.0
(e) Provide more scholarships and free education to women up to the high school level.	30	17.8
(f) Increase hostel facilities for girls at school and university.	24	14.2
(g) Initiate programmes promoting/publishing female education.	19	11.2
(h) Equal participation in household work and decision-making.	13	7.7
(i) Change conservative socio-cultural attitudes.	11	6.5
(j) No response.	12	7.1

University Women Alumni. Eighteen University Alumni members (all females) responded to the questionnaire. The majority (88.9 per cent) were Hindus, 5.6 per cent were Buddhist and 5.6 per cent were unclassified. About two-thirds (66.7 per cent) of the Alumni were married; their age ranged from below 25 years to 45 years. With regard to level of education, 77.8 per cent of the Alumni members held masters degrees and the remaining 22.8 per cent held bachelor degrees.

Asked whether they faced obstacles while pursuing higher education, 61.1 per cent of the Alumni reported that they had not experienced any problems, 22.2 per cent indicated that they had some problems, and the rest did not respond. The problems mentioned were related to economic conditions.

Of the six unmarried Alumni members, two indicated that their guardians were in agriculture and two said their guardians worked in business (the remaining two did not respond to this question). Eight of the married Alumni members' husbands were employed in government offices, holding positions ranging from a

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Section Officer to a Special Class Officer. Of the 18 Alumni members, 14 were employed and four were unemployed but desiring work. Twelve of the 18 Alumni members expressed satisfaction with their present job. Among them, nine said that they were satisfied to some extent and five were highly satisfied. Among the husbands of the 12 married Alumni members, eight had an annual income in the bracket of Rs. 15,000 to Rs. 25,000.

Regarding factors facilitating their pursuit of higher education, the majority (15) of the Alumni members mentioned the support and encouragement of guardians (parents and husbands). Three out of the 18 Alumni members completed their studies after marriage with their husbands' support and encouragement.

Asked whether they were still interested in pursuing higher education if circumstances permitted, the majority (77.8 per cent) expressed their desire to do so. Some (33.3 per cent) wanted to go even to the Ph.D. level. The Alumni mentioned eight factors which they considered to be responsible for lowering the participation of women in higher education. The prominent factors listed were: (a) poor economic conditions (22.9 per cent), (b) conservative social outlook and cultural values (22.9 per cent), (c) early marriage (10.4 per cent), and (d) household duties (18.8 per cent). Other factors mentioned were (e) sex discrimination or prejudice (6.3 per cent), (f) geographical factors (6.3 per cent), (g) lack of employment opportunities for women (6.3 per cent), (h) illiteracy and lack of awareness among parents (2.1 per cent), and (i) lack of social awareness among females themselves (2.1 per cent).

When asked to suggest measures for ensuring better and wider participation of women in higher education, the Alumni stressed several factors: (a) special provision of job opportunities for women (33.4 per cent), (b) implementation of special programmes for women (9.1 per cent), (c) sharing of decision-making and household responsibilities (9.2 per cent), (d) need to change the conservative social outlook (6.1 per cent), (e) provision of free education for women (6.1 per cent), (f) discouragement of early marriage (6.1 per cent), and (g) increased awareness among parents and women themselves of feminist issues through the use of the mass media (27.3 per cent).

Teaching staff attitudes. Altogether, 48 campus teachers were included in the study (39 females and nine males). Among the female teachers, 38.5 per cent were Brahmins, 25.6 per cent Newars, 7.7 per cent Chhetris, and 7.7 per cent were 'others', while 20.5 per cent did not reply to the question.

The majority of the teachers (71.8 per cent) were from urban areas and just 10 per cent came from rural areas (nearly 18 per cent did not respond). In terms of religion, 61.5 per cent were Hindus, 10 per cent Buddhists and 28 per cent did not specify their religion. The Hindu and Buddhist females were more highly educated than the other females in the sample.

A higher percentage of male teachers in comparison to female teachers were found to be married (Table 3.25). The reason for a higher percentage of the female teachers remaining unmarried could be due to unavailability of suitable partners.

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Table 3.25 Marital status of the campus teachers

Marital Status	Male		Female	
	No.	%	No.	%
Single	1	11.1	12	30.8
Married	8	88.9	24	61.5
Widowed	-	-	2	5.1
Divorced	-	-	-	-
Not stated	-	-	1	2.6
Total	9	100.0	39	100.0

The highest percentage of the campus teachers, both male and female, were within the 35 to 45 years old age-group (Table 3.26).

Table 3.26 Distribution of teachers by age-group

Age Group	Male		Female	
	No.	%	No.	%
Below 25 years	0	-	1	2.6
25 - 35 years	2	22.2	16	41.0
35 - 45 years	4	44.4	19	48.7
45 - 55 years	3	33.3	2	5.1
55 - 60 years	0	-	0	-
Not stated	0	-	1	2.6
Total	9	100.0	39	100.0

Most of the teachers held masters degrees (Table 3.27). A larger percentage of male than female teachers held Ph.D.s. Although the minimum qualification required for campus teachers is a masters degree, 11 per cent of the male teachers and 8 per cent of the female teachers had only bachelor degrees. Technical institutes may appoint lower formally qualified teachers on account of shortage of technically qualified applicants.

Table 3.27 Distribution of campus teachers by educational qualification

Qualification	Male		Female	
	No.	%	No.	%
Ph.D.	3	33.0	4	10.3
Master	5	56.0	29	74.4
Bachelor	1	11.0	3	7.7
Not stated	0	-	3	7.7
Total	9	100.0	39	100.0

Table 3.28 Reasons for choosing teaching

Reason	Male		Female	
	No.*	%	No.	%
Personal interest	5	35.7	25	52.0
Social status	4	28.6	8	16.7
Enhanced career prospects	5	35.7	6	12.5
Reduced working hours	-	-	3	6.3
Compulsion	-	-	1	2.1
Trapped	-	-	1	2.1
Family situation	-	-	1	2.1
Better salary	-	-	-	-
Other	-	-	1	2.1
Not stated	-	-	2	4.2
Total	14	100.0	48	100.0

*A respondent may have indicated more than one reason

The respondents indicated seven reasons for choosing the teaching profession (Table 3.28). The majority (52.1 per cent of the female teachers joined the university because of personal interest. The percentage of female teachers doing so was greater than that for male teachers (35.7 per cent). The second major reason expressed by female teachers was enhancement of social status. This indicates that some of the teachers (male 28.6 per cent and female 16.7 per cent) considered teaching at the university or colleges as a symbol of high social esteem. It is interesting to note that the percentage of male teachers who considered teaching at college and university levels to be a symbol of high social status was greater than that for female teachers.

Only 6.3 per cent of female teachers joined the university for reasons of reduced working hours. About 6 per cent of the female campus teachers joined the university for reasons beyond their control. None of the teachers joined the university for better salary.

Eight types of 'feelings' were expressed by the female teachers towards their jobs (Table 3.29). The majority (69 per cent) of the women teachers were happy, economically secure and proud of being campus teachers. About 18 per cent of them, on the other hand, were unhappy and felt discriminated against, humiliated and harassed. About 9 per cent expressed no opinion.

Feelings like being happy, economically secure and proud of being a teacher seem to correspond with responses like personal interest, social status and better prospects as the reasons given for joining the teaching profession at the university. These positive feelings about being a teacher seem to be further supported by the female respondents' opinions about discrimination on the job. The majority of them (50 per cent) did not feel discriminated against in any form. However, about one third felt the opposite.

Table 3.29 Female teachers' feelings about their jobs

Expression	No.*	%
Happy	16	35.6
Economically secure	8	17.8
Proud	7	15.6
Discriminated	5	11.1
Humiliated	1	2.2
Harassed	1	2.2
Unhappy	1	2.2
Cannot say	4	8.9
Not stated	2	4.4
Total	45	100.0

*A respondent may have indicated more than one reason

The female teachers who felt discriminated against contributed this to their immediate supervisor, boss or another person in authority (43.8 per cent) and to administrative personnel (37.5 per cent). Only about 19 per cent felt discriminated against by students.

The types of discriminative practices as expressed by the female teachers are indicated in Table 3.30. Of those responding to this item (over 50 per cent did not respond), almost 58 per cent of the female teachers expressed partiality towards males as a form of discrimination. About 26 per cent felt neglected, i.e., they were not given as many opportunities as were given to their male colleagues. About 5 per cent felt humiliated and 11 per cent expressed other forms of discrimination which were not specified. Of those who felt discriminated against, 23 per cent stated that their complaints were positively responded to, while another 23 per cent said their complaints were overlooked.

Table 3.30 Forms of discrimination identified by female campus teachers

Form of Discrimination	No.*	%
Partiality towards males	11	57.9
Neglect	5	26.3
Humiliation	1	5.3
Other	2	10.5
Total	19	100.0

*Only those respondents answering item.

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In terms of measures to eliminate discrimination, 87 per cent of the female campus teachers suggested that there should be an impartial and helpful administration, while 18 per cent stated that women themselves should be bold enough to complain whenever they feel discriminated against, neglected or humiliated.

With regard to factors responsible for lower participation of women in higher education, the respondents identified five main reasons. These were: illiteracy among parents and prejudice against daughters (35 per cent), conservative attitudes (29 per cent), poor economic conditions (23 per cent), lack of institutional support (10 per cent) and geographical location (3 per cent).

In order to increase the participation of women in higher education the female teachers suggested 19 measures. The measures they identified stressed the need for consciousness-raising and increasing awareness of the importance of female education (22 per cent), providing economic support (29 per cent), discouraging conservative social norms (14 per cent) and providing institutional support (23 per cent).

Administrators and policy-makers. Seventeen policy-makers and administrators responded to the questionnaire regarding the participation of women in higher education. Among them were eight females and nine males. According to ethnicity, the group consisted of Newar (41.2 per cent), Brahmin (29.4 per cent) and the Chhetri (29.4 per cent). In terms of religion, 88 per cent were Hindus and 12 per cent Buddhists. Eighty-eight per cent were married, 6 per cent widowed while 6 per cent did not respond to this item. None of the respondents were below 36 years of age (Table 3.31).

Table 3.31 Distribution of the policy-makers and administrators by age and marital status

Age Group	No.	%	Marital Status	No.	%
Below 25 years	0	-	Married	15	88.2
25 - 35 years	0	-	Widowed	1	5.9
35 - 45 years	6	35.3	Single	-	-
45 - 55 years	9	52.9	Divorced	-	-
55 and Above	1	5.9	Not stated	1	5.9
Not stated	1	5.9			
Total	17	100.0	Total	17	100.0

The highest percentage of the policy-makers and administrators was within the age group of 45-55 years, the second highest was within the age group of 35-45 years; and 6 per cent were above 55 years of age. The age distribution indicates that respondents were relatively mature. The positions held ranged from under secretary level to the State Minister level. Posts of first appointment ranged from surveyor to director.

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All of the policy-makers and administrators were well-qualified. None of them held degrees below the masters degree level (about 53 per cent of them had masters degrees and 47 per cent had Ph.D. degrees).

Most of the policy-makers and administrators (82 per cent) were members of one or another professional or social organization. This indicates that most of them were engaged also in spheres of activities other than those relating to their official duties. The organizations they were members of were Centre for International Development, College and University Teachers' Association, Nepal Literacy Association, Nepal Geological Society, Nepal Buddhist Association, Institute of Third World Economic Studies, and Business and Professional Women's Club.

When asked about policies designed to increase the participation of women in higher education, 41 per cent of the respondents stated that they were actively engaged in such matters, while 53 per cent stated they were not. Six per cent did not respond to this item.

Nearly 65 per cent of the policy-makers and administrators identified policies designed to increase the number of female enrolment in higher education. These policies were directed at: increasing the enrolment of girls at school level, incorporating women into the mainstream of national development by offering them opportunities to gain higher education, upgrading qualifications of female school teachers so as to motivate and attract more girls to schools, and admitting 10 per cent of girls to technical institutes of higher education. Economic incentives are being used to implement these policies. Awards of stipends of Rs. 5.0, Rs. 10.0 and Rs. 30.0 are given to primary, lower secondary and secondary school girls respectively who achieve 100 per cent attendance. The policy that at least 10 per cent of the students in technical institutes of higher education should be female was instituted in 1985. Along with these programmes, medals were awarded to some girls as recognition of their outstanding performances in different subjects.

In response to the question about information regarding job placement of women, 41 per cent of the respondents replied in the positive, 47 per cent stated they did not have such information and 12 per cent did not respond. Job placement organizations identified were: Business and Professional Women's Club, Nepal Women's Organization, Women's Services Co-ordination Committee, Women's Development Training Centre, and Skill Development Programme for Women under the Ministry of Panchayat and Local Development as well as the Ministry of Labour and Social Welfare. However, all of these organizations are not job placement offices, rather, they are training centres. Moreover, these organizations are specially meant for those adult women with very little or no education.

Regarding factors responsible for lower participation of women in higher education, altogether, 17 were mentioned by the respondents. These factors were collapsed into four categories for analysis – economics, social, educational and geographical. Of these four factors, social factors were mentioned by 42 per cent, economic by 40 per cent, educational by 9 per cent and geographical by 7 per cent (Table 3.32).

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Table 3.32 Factors responsible for low participation of women in higher education

Factor	No.	%
Economic	17	39.5
Social	18	41.9
Educational	4	9.3
Geographic	3	7.0
Not stated	1	2.3
Total	43	100.0

Social factors included such items as social norms, beliefs and values, early marriage, women being considered as only child-bearing machines and male chauvinism. Economic factors consisted of items like heavy involvement in household activities, lack of job opportunities, and lack of recognition by males of women as bread-earners and contributors to the economy. Educational factors consisted of items like lack of awareness, low participation and progression rates. The geographical factors included items such as long distances between home and college and lack of colleges and schools in isolated regions.

In order to increase the participation of women in higher education, some 23 measures were suggested by the respondents. The measures were categorized into ten items (Table 3.33).

Table 3.33 Policy-makers and administrators' suggestions for increasing female participation in higher education

Suggestion	%
1. Increase parental awareness of the importance of education, regardless of sex	15.0
2. Avail suitable jobs to women	13.0
3. Free and compulsory education for women	13.0
4. Change social attitudes	4.0
5. Develop in women themselves an awareness of their social importance	4.0
6. Avoid early marriage	4.0
7. Equality in both the home and in decision-making	20.0
8. Appropriate facilities: campus hostels, day-care centres, etc.	15.0
9. Involvement of women in the mainstream of national development	4.0
10. Research on women's issues and their status advancement	8.0
Total	100.0

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Gender equality with regard to household responsibilities and decision-making activities was emphasized by the highest number (20 per cent) of the policy-makers and administrators. This may indicate that the respondents perceive a lack of equality in both the home and in public life. The need to develop in parents an awareness of the importance of education for their children, regardless of sex, was suggested by 15 per cent of the respondents. Again, this may imply that many parents lack and adequate appreciation of the need for educational opportunities for their daughters.

Fifteen per cent of the respondents suggested that female participation in higher education could be improved through the provision of appropriate facilities, such as, an adequate number of hostels, easy access to campuses, and day-care centres for children. This indicates that there were women who wanted to continue their higher studies but could not do so because of the non-availability of appropriate facilities.

Thirteen per cent of the respondents suggested that educated women should be given suitable jobs. But they did not specify what types of jobs would be suitable for women.

In order to increase the proportion of women in higher education, 13 per cent of the respondents suggested that education for women at all levels be made free and compulsory. Eight per cent of the respondents opined that educated women be placed in decision-making positions in government and semi-government organizations.

Other suggestions were: change people's attitudes towards women (4 per cent), develop in women themselves the consciousness of their important role in the society, discourage or avoid early marriage of girls (4 per cent) and effectively implement the policy of involving women in the mainstream of national development (4 per cent).

In summary, the policy-makers and administrators mainly emphasized parental awareness, equal opportunity, facilities conducive to pursuing higher education and placing women in decision-making positions as measures that would help increase the participation of women in higher education as well as assist the development of the nation.

Conclusion and recommendations

Though the participation of females in all certificate, bachelor and post-graduate levels of education increased from 6,641 in 1980 to 12,629 in 1985 in absolute terms, the percentage of participation remained low. It was 19.6 per cent in 1980 and 23.2 per cent in 1985 (female enrolment at private campuses was 15 per cent in 1980 and 16.5 per cent in 1985). The female participation rates are even lower when it comes to technical education. The number of students in technical education was 536 in 1980 and 830 in 1985. Progress has been made but it has not been rapid.

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Among the five Development Regions the highest percentage of female enrolment was recorded in the Central Development Region (21.6 per cent in 1980 and 26.1 per cent in 1985) and lowest in the Far Western Development Region (5.4 per cent in 1980 and 10 per cent in 1985).

The participation of female teachers in Tribhuvan University is also very low compared to male teachers (19 per cent female teachers in 1980 and 17.8 per cent in 1985). There is not much difference in percentage between technical teaching (18.2 per cent in 1980 and 19 per cent in 1985) compared to general education (19.6 per cent in 1980 and 17.8 per cent in 1985). With regard to the research centres, the percentage of female employees is quite low (10.5 per cent in 1980 and 10.8 per cent in 1985).

In 1980 the majority of female teachers (53 per cent) held Assistant Lectureships against 42 per cent of males holding such positions. The situation was little changed by 1985. In 1980 only 0.9 per cent of the female teachers held Readerships or equivalent posts. In that year 2.2 per cent of their male colleagues had achieved the level of Reader. In 1985, 2.4 per cent of the female teachers were Readers against 6.3 per cent of their male colleagues holding this position.

Nearly 88 per cent in 1980 and 84 per cent in 1985 of females and 82 per cent (1980) and 79 per cent (1985) of male teachers held masters degree or equivalent qualifications, and 0.3 per cent and 2.3 per cent of females and 2 per cent and 8.8 per cent of male teachers respectively held Ph.D. degrees in 1980 and 1985.

Around 6 per cent of the total administrative staff (TU and private campuses) are females. Only one female held the post of administrator (top level post in administration).

The enrolment of girls in school tells the same story. In grade one the difference is 38 per cent between the number of male and female enrolments (69 per cent male – 31 per cent female), but in grade ten the difference rises to 55 per cent. The initial differences goes on increasing at each successive level.

In rural areas more than 55 per cent of agricultural work is carried out by women. They are responsible mainly for livestock rearing, collection of fuel wood and litter for compost. Since parents themselves are not educated they do not realize the importance of education for their children. Moreover, most of the rural parents living under subsistence level simply cannot afford tuition fees for their off-spring. In many cases they are not in a position to send their children away for schooling, for their services are needed at home. And under such circumstances, if they do send their children to school, they generally prefer the boys to go for they carry on the family tree and, according to superstition, bring salvation to their parents after death. Since daughters are married away, investment in their education is considered to be a loss. Social norms and cultural values also devalue higher education for females; they are supposed to confine their activities to the home only.

Provision of scholarships for girls and cash awards and medals to the schools which enrolment the highest number of girl students are some of the measures being undertaken to attract larger numbers of girls to schools.

In consideration of the vital role women can play in bringing about significant reduction in the total fertility rate (TFR), the National Planning Commission has adopted a long-term strategy for reducing it to 2.5 from 6.3 and the consequent growth rate of population from 2.66 per cent to 1.2 per cent per annum.

Though research on aspects of women's development has been carried out by local research centres, no significant policy, programmes or strategies have been adopted or implemented in Nepal to promote women's participation in higher education. What has been done is confined to the primary and, to some extent, secondary levels of education.

Of those sampled, the highest percentage (40.8 per cent) of school students aspire to study science and technology, 14.5 per cent of them prefer medicine and 13 per cent each give priority to engineering and humanities. Just six (7.9 per cent), five (6.6 per cent), two (2.6 per cent) and one (1.3 per cent) expressed their interest in management, law, education and agriculture respectively.

About 65 per cent of the administrators and policy-makers sampled stated that there were policies to encourage female participation in higher education. According to them there are policies: (a) to increase the enrolment of girls at school level, (b) to incorporate women into the mainstream of national development by offering them the opportunities for higher education, (c) to upgrade qualifications of female school teachers so as to motivate and attract girls to school, and (d) to set aside 10 per cent of places for girls in technical institutes of higher learning.

The impeding factors responsible for lower participation of women in higher education in terms of combining the responses from the four types of questionnaires are: conservative socio-cultural attitudes, 133 respondents (27 per cent); poor socio-economic condition, 85 respondents (17.2 per cent); heavy involvement in household work, 64 respondents (13 per cent); and early marriage and sex discrimination, 41 respondents (8.3 per cent).

Almost all students aspire to pursue higher education, but due to poor socio-economic conditions and conservative socio-cultural values, like early marriage and household responsibilities, the girls are compelled to discontinue their studies.

The majority of the female campus students (87 per cent) expressed their intention of pursuing further studies. The prime factors prompting them to pursue higher levels of education were socio-economic ones. An analysis of cross-variables reveals that the main factor that facilitated the females in pursuing higher education was their guardians' support and encouragement.

Regarding factors facilitating higher level of study, out of 18 university women alumni, 15 identified the support and encouragement of guardians. The majority of them still want to pursue higher education if given the opportunity. About 85 per cent said that they were satisfied with their present job.

The majority (69 per cent) of the female teachers are happy, economically secure and proud of being campus teachers. Illiteracy among parents and sex prejudice (55 per cent), conservative social outlook (29 per cent), poor economic conditions (23 per cent), lack of institutional support (19 per cent) and geography

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(3 per cent) are, according to the teachers, the deep-rooted causes responsible for the lower participation of women in higher education.

Recommendations

The data obtained in this study, and their analysis, support a number of recommendations. First, adequate enrolment quotas should be provided for female students in higher education, irrespective of their field of study or professional specialization. It is imperative to formulate specific strategies, policy and programmes to promote female enrolment in higher education in general and technical education in particular.

Second, special policy, programmes and strategies aimed at promoting female education at all levels in the remote regions should be adopted.

Third, preference should be given to female candidates with regard to recruitment, promotion and the awarding of scholarships for further studies at all levels. Females should be given opportunities to attend seminars, both inside and outside the country. Females should be represented in policy-making bodies as well. A separate women's division in the university should be opened to encourage female scholars in research activities concerning women, on the one hand, and it should be made to act as a counselling body in the university concerned with promoting female education, on the other.

Fourth, however difficult it may be, parents should be encouraged to provide equal educational opportunities to both their male and female children. Moreover, parents who send their daughters to school and encourage and make them continue their studies should be given some sort of economic incentive or reward. The National Commission on Population has been launching such a programme in a few selected districts.

Fifth, education up to SLC (tenth grade) level, specially for females, should be made free and compulsory. Educational institutes which enrol more female students and encourage them to continue their studies should be rewarded.

Sixth, the Ministry of Education and Culture should approve curricula and textbooks which aim at imparting knowledge and encouraging and motivating male students to participate in activities related to household chores and for female students to participate in technical education activities from the primary level onwards.

Seventh, women should have an equal share and opportunity to participate in decision-making affairs, wherever it is possible, at all local and national levels. This can be achieved only by offering females greater opportunities to participate in higher education.

Eighth, the media should be used to instil among the masses the message that, "If you educate a man you educate a person, if you educate a woman you educate the entire family". Adult education should be encouraged, legal age of marriage should be raised from 16 years to 18 years for females and from 18 years

to 21 years for males, and more schools at village level should be opened in order to spread education, in general, and female education, in particular.

Finally, it is recommended that a research centre to document and further investigate the role of women in Nepalese society in general and in higher education in particular be established as a high priority. Only through the systematic and thorough collection and analysis of information can policies which adequately address many of the problems currently faced by women be developed and implemented.

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Chapter Four

PARTICIPATION OF WOMEN IN HIGHER EDUCATION IN THE PHILIPPINES

by

Paz Policarpio Mendez

Introduction

Geographically, the Philippines is an archipelago of approximately 7,100 islands with a land area of 114,830 square statute miles. However, only about one hundred islands are truly inhabited. Its terrain is mountainous, with Mount Apo in Mindanao at 9,600 feet the highest peak. The climate is tropical and natural resources abound. Coconut, sugar, minerals and lumber are some important Philippine exports and oil exploration shows signs of being productive.

While the majority of Filipinos have Malay ancestry, the population is made up of a mixture of ethnic groups. It is thought that the Philippines was originally connected with mainland Asia by land bridges via Formosa (Taiwan) from the north and to Palawan in the south. It was across these land bridges that the first settlers probably came.

After periods of foreign influence, particularly by the Spanish, American and Japanese, the Third Philippine Republic was proclaimed in 1946, making the Philippines a self-governing nation.

Spain brought Christianity to the Philippines, making the country the only Christian nation in Asia. The American introduced a national literacy programme and promoted English as a second language.

The 1980 census placed the Philippines population at 48,098,460 with an average annual growth rate of 2.17 per cent. Based on the 1980 figures, 24,128,755 or 50.2 per cent of the population is male and 23,969,705 or 49.8 per cent is female. About 63 per cent of the population live in rural regions and 37 per cent in urban areas.

The objectives of this research are as follows:

- a) to analyse the progress of women's participation in the higher education system;
- b) to identify and analyse facilitating factors that enhance women's participation in higher education;

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- c) to identify and analyse blockages that impede women's participation in higher education; and
- d) to suggest measures that will help to increase the participation of women in higher education.

Methodology

A variety of methods and strategies were used to gather data for this research. Although it is mostly an analytical survey, it also made use of the historical method and a micro level case study of one university. Government and private sources included publications, bulletins, reports and handouts. Also consulted were Unesco publications, Fund for Assistance to Private Education (FAPE) books, and Centro Escolar University (CEU) doctoral dissertations. Letters seeking information, personal interviews, and even stationery of professional organizations listing their officers, were used.

For the most part, however, questionnaires were used to gather basic information from the various institutions included in the study. The survey asked for information on participation over a ten-year period at intervals of five years, i.e., information was recorded for the 1975-1976 academic year, the 1980-1981 academic year and for the 1985-1986 academic year. The type of data collected fell into three broad categories: student participation, teaching and related functions, and policy-making and administration. Only institutions of higher education – universities, colleges and equivalent institutions offering courses leading to bachelors, masters or doctoral degrees of a professional or general nature – have been included in the study. The undergraduate level was separated from the graduate programmes in all cases.

At the macro level, advantage was taken of the 13 educational regions into which the country is divided. The association of regional directors and assistant directors under the presidency of the National Capital Regional Director facilitated the distribution of questionnaires to the various regions following sampling techniques, according to the number of colleges in the region. Institutions were classified as either public or private. The private colleges in turn were divided into sectarian and non-sectarian.

Data from the Department of Education were obtained from the Department itself. Special mention should be made of the lists of names of superintendents and assistant superintendents. In special cases, help was secured from CEU Muslim students in identifying names as male or female. For background information on the superintendency, CEU doctoral dissertations on the subject were consulted.

A note on terminology. The term *higher education* is limited to programmes necessitating usually four years of study beyond high school which, in the case of the Philippines, is usually ten years (many private high schools, however, require seven years of elementary schooling). These degree courses excluded the one, two or three-year vocational and other courses even though these are taken after finishing secondary education. These short-term courses lead only to a *certificate*, not a *degree*.

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Background

The Department of Education, Culture and Sports (DECS) administers the educational system, the country's largest department in terms of number of people served. The 1986 Constitution extended free and compulsory education to the high school level. Free and compulsory education at the elementary level had previously been instituted.

Administrators, policy-makers. This section presents a comparison of male and female key national school officials for the years 1981 and 1987. The list for 1975 was not available.

Of the 74 key officials in 1987, 40 were women, more than one-half of the total number. In the 1981 directory of 108 school officials, 53, or 49 per cent, were women. The disparity in the number of key officials is due to the inclusion in the 1981 list of the director and assistant director of the National Library, National Museum, National Historical Institute and Institute of National Language. Also absent from the 1987 list are the EDPITAF officials (Educational Development Projects Implementation Task Force).

The incumbent Secretary of Education, Dr. Lourdes Quisumbing, is the first woman to occupy the highest position in the educational system. She belongs to the private sector, having been formerly president of a women's college. In the 1981 list, there was a woman Under-secretary (Dr. Felicitas Bernardino) who had previously been a superintendent and who rose from the ranks. The 1987 list also has a woman Under-secretary (Dr. Minda Sutaria), a career educator formerly director of elementary education.

Next to the Secretary and the Under-secretary in rank are the directors of the following services: Administrative; Financial and Management; Information and Publication; Planning; and Child and Youth Research Centre. Then there are the Population Education Unit; Foreign Students and Special Activities Office; Teachers' Camp and Baguio Vacation Normal School and Instructional Materials. There are six education bureaux: Elementary; Secondary; Higher; Physical Education and Sports; Technical and Vocational; and Non-formal. In addition, there are departments of School Health and Nutrition; Institute of Philippine Language; National Library; National Historical Institute; and National Museum.

The centre of the educational administrative system is Manila, the capital of the country. Thus the Secretary of Education, Culture and Sports, the four under-secretaries, the heads of the various services, centres, and institutes hold offices in the capital but often make official visits outside Manila.

Regional directors. The list of regional directors includes one woman in 1981 and four in 1987. In 1981, there were three female assistant directors and only one in 1987. An investigation of their names shows a promotion of the assistant directors to full directors upon the transfer or retirement of the first directors.

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Superintendents and assistant superintendents. Table 4.1 compares the distribution of male and female superintendents in 1981 and 1987.

Table 4.1 Distribution of male and female superintendents in 1981 and 1987 by region

Region	1981			1987		
	Male	Female	Total	Male	Female	Total
I	7	4	11	9	2	11
II	5	2	7	5	2	7
III	6	3	9	5	4	9
IV	4	11	15	5	11	16
V	5	4	9	2	7	9
VI	11	3	14	9	4	13
VII	4	5	9	4	5	9
VIII	6	3	9	5	4	9
IX	9	0	9	6	3	9
X	10	3	13	5	7	12
XI	5	2	7	4	3	7
XII	9	0	9	7	2	9
NCR	1	3	4	2	2	4
Total	82	43	125	68	56	124
% of Total	(65.6)	(34.4)	(100.0)	(54.8)	(45.2)	(100.0)

I = Ilocos Region; II = Cagayan Valley; III = Central Luzon; IV = Southern Tagalog; V = Bicol Region; VI = Western Visayas; VII = Central Visayas; VIII = Eastern Visayas; IX = Western Mindanao; X = Northern Mindanao; XI = Southern Mindanao; XII = Central Mindanao; NCR = National Capital Region.

Of the 125 full superintendents in the 13 regions, 82 (65.6 per cent) were male and 43 (34.4 per cent) were female. Six years later, in 1987, of the 124 full superintendents (two were vacant) 68 (54.8 per cent) were male and 56 (45.2 per cent) were female. There was a reduction of 10.8 per cent for the males and a corresponding increase of 10.8 per cent for the females.

There were no regional patterns of increases or decreases in the number of female superintendents; only a general pattern of 10 per cent increase for the female superintendents from 1981 to 1987. Worth noting too is that female full superintendents numbered highest in Region IV, the largest region in terms of the number of superintendents. On the other hand, NCR (Metropolitan Manila) has only four superintendents, although it has the most important colleges and universities in the country. It appears too, that every province and city was entitled to one full superintendent each with two to four assistant superintendents assigned to big cities and provinces. For instance, Region IV has 11 provinces and five cities, so it had 15 and 16 full superintendents in 1981 and 1987 respectively. In 1981, it had 19 assistant superintendents; in 1987, 23 assistant superintendents.

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The data in Table 4.2 show that of 143 assistant superintendents, 82, or 57.34 per cent, were male and 61, or 42.6 per cent, were female.

Table 4.2 Distribution of male and female assistant superintendents in 1981 and 1987 by region

Region	1981			1987		
	Male	Female	Total	Male	Female	Total
I	9	7	16	9	7	16
II	8	1	9	3	7	10
III	6	6	12	6	10	16
IV	9	10	19	8	15	23
V	5	5	10	7	6	13
VI	11	6	17	7	13	20
VII	3	3	6	8	4	12
VIII	4	3	7	7	3	10
IX	6	2	8	7	2	9
X	5	3	8	4	10	14
XI	5	7	12	2	7	9
XII	7	2	9	11	4	15
Total	82	61	143	83	95	178
% of Total	(57.3)	(42.7)	(100.0)	(46.6)	(53.4)	(100.0)

See table 4.2 for names of regions

In 1987, there was an increase of 35 assistant superintendents (seven positions were declared vacant), the male assistant superintendents had increased in number by one. The female assistant superintendents increased by 34, making a total of 95 (53.37 per cent). The female percentage increase from 1981 to 1987 is 10.72 per cent, similar to the percentage increase among the female full superintendents. Female assistant superintendents now outnumber the males. Considering the fact that many assistant superintendents are promoted to full superintendents, in the not too distant future there may also be more female than male full superintendents.

Presidents of state colleges and universities. A 1980 directory of presidents of state colleges and universities listed a total of 49, including the acting presidents and the OICs. Of the 49 public education institutions of higher learning, 32 were colleges and 17 were universities. Of these, four were headed by females or 8.16 per cent of the total. One woman was president of a large state university in Northern Luzon; three women were college presidents.

In 1987, seven years later, the number of state colleges and universities had risen to 76. Of this number, 57 were colleges and 19 were universities. Eight colleges and one university were headed by women, making a total of nine (11.84 per cent), an increase of 4 per cent over the 1980 figure.

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State colleges and universities have their own charters and are more or less autonomous except that their boards of trustees are usually headed by the Secretary of Education who may delegate his/her powers to the under-secretaries or the Director of Higher Education.

Analysis of the progress of women's participation in the higher education system of the Philippines

Student participation

Undergraduate. This section presents and analyses data gathered from the various higher education institutions which participated in the survey. Of the 323 colleges and universities from the country's 13 regions which responded to the request for information, 275 (85.1 per cent) were located in the private sector. Of these, 158 (48.9 per cent of the responding institutions) were non-sectarian institutions and 117 (36.2 per cent) were sectarian institutions. Forty-eight public (state) colleges and universities provided information, accounting for 14.9 per cent of the responding institutions (Table 4.3).

Table 4.3 Distribution of college and university students by institutional sector (public/private) and academic year

Type of Institution	No. of Institutions		Year								Total	
			1975-1976		1980-1981		1985-1986					
	No.	%	No.	%	No.	%	No.	%	No.	%		
Private												
Sectarian	117	36.2	226776	29.0	369687	32.6	406601	33.0	1003064	31.9		
Non-Sectarian	158	48.9	497391	63.5	677948	59.8	708590	57.6	1883929	59.8		
Public												
	48	14.9	59001	7.5	85813	7.6	115717	9.4	260531	8.3		
Total	323	100	783168	100	1133448	100	1230908	100	3147524	100		

With regard to students from the participating institutions, approximately 60 per cent were enrolled in the private non-sectarian colleges, 32 per cent in the private sectarian institutions and about 8 per cent were enrolled in the public colleges and universities (Table 4.3).

Insofar as cumulative enrolment over the last ten years (1975 to 1985) are concerned, the females outnumber the males to varying degrees in all the regions of the country.

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In the 1975-1976 academic year, the ratio of female to male students was approximately 60:40 (Table 4.4). Although by 1985-1986 total enrolment had increased substantially, the female/male student ratio remained about the same. As a proportion of enrolment, the number of female students increased over the ten year period, but only marginally: from 59.1 per cent in 1975 to 61.5 per cent in 1985. In other words, during the period under examination, female higher education students in the Philippines seem to have increased slightly what was already their advantageous share of the 'student pie'.

Table 4.4 Gender distribution of college and university undergraduate students by academic year

Academic Year	Male		Female		Total	
	No.	%	No.	%	No.	%
1975 - 1976	250938	40.9	361925	59.1	612863	100.0
1980 - 1981	359102	38.6	511323	61.4	930425	100.0
1985 - 1986	385824	38.5	616726	61.5	1002550	100.0
Total	995864	39.1	1549974	60.9	2545838	100.0

Only in the following fields of study are the number of male enrolment larger than the number of female enrolment (Table 4.5): Humanities, religion and theology; law; medicine (only for 1975-1976); engineering; architecture and town planning; transport and communications; agriculture, forestry and fishery; and criminology.

It is interesting to note that in medicine in the 1975-1976 academic year, the number of male medical students outnumbered the female medical students. But by the 1980-1981 academic year, the situation was reversed with female medical students outnumbering the males. This was achieved in spite of certain restrictions placed on female enrolment in the field of medicine. For instance, the University of the Philippines limits the number of female medical students to 50 per cent of first year entrants and prescribes a higher entry score for females sitting the stiff entrance examinations.

Engineering is clearly a male-dominated field. Eighty per cent of engineering students are male. Nonetheless, there were more than 34,000 female engineering students in 1985-1986, an increase of about 14,000 female engineering students over the 1975-1976 academic year (Table 4.5). Though beyond the scope of the data collected, it is probably safe to say that the majority of female engineering students are enrolled in chemical engineering, while males dominate the mechanical and civil engineering courses.

With regard to the other fields listed above in which there was a higher proportion of male students relative to female students, females have been increasing their rate of participation, both in proportional and actual terms.

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Table 4.5 Gender distribution of college and university undergraduate students by field of study and academic year

Field of Study	Sex	Year						Total	
		1975-1976		1980-1981		1985-1986			
		No.	%	No.	%	No.	%	No.	%
Ed. & teacher training	M	7338	15.9	10645	12.7	18089	13.6	36072	13.7
	F	38712	84.1	73365	87.3	114880	86.4	226957	86.3
Hum., religion & theology	M	102	64.6	254	64.1	309	68.7	665	66.4
	F	56	35.4	142	35.9	141	31.3	337	33.6
Fine & appl. arts	M	443	21.3	1352	47.4	1634	42.8	3429	39.2
	F	1639	78.7	1498	52.6	2180	57.2	5317	60.8
Law	M	4217	75.9	6308	75.6	7561	69.9	18086	73.2
	F	1337	24.1	2035	24.4	3253	30.1	6625	26.8
Soc. & benav. sc.	M	590	13.2	1243	19.4	2640	35.1	4473	24.3
	F	3869	86.8	5167	80.6	4888	64.9	13926	75.7
Com. & business administration	M	72973	33.3	117025	27.8	100350	27.1	290348	28.7
	F	146472	66.7	303487	72.2	270478	72.9	720437	71.3
Mass communication & doc.	M	14	26.9	37	14.9	59	14.0	110	15.2
	F	38	73.1	211	85.1	363	86.0	612	84.8
Home economics	M	49	0.7	89	0.9	94	2.0	232	1.0
	F	7174	99.3	10336	99.1	4605	98.0	22115	99.0
Service trades	M	0	0.0	383	9.5	483	10.5	866	9.3
	F	651	100.0	3658	90.5	4099	89.5	8404	90.7
Natural science	M	671	40.5	844	32.6	1137	34.9	2652	35.4
	F	984	59.5	1745	67.4	2118	65.1	4847	64.6
Maths. & computer science	M	39	37.5	27	32.9	921	35.0	987	35.0
	F	65	62.5	55	67.1	1714	65.0	1833	65.0
Medical & health science	M	13257	15.2	11213	18.2	17296	19.6	41766	17.6
	F	73821	84.8	50514	81.8	70909	80.4	195244	82.4
Dentistry	M	518	33.4	1341	32.8	2333	23.9	4192	27.3
	F	1035	66.6	2744	67.2	7414	76.1	11193	72.7
Nursing	M	6076	10.2	2808	8.5	5178	11.9	14063	10.0
	F	57383	89.8	30411	91.5	38407	88.1	126201	90.0
Pharmacy	M	237	6.9	386	8.9	368	6.8	991	7.5
	F	3185	93.1	3960	91.1	5023	93.2	12168	92.5
Optometry	M	178	20.7	296	17.3	343	17.9	817	18.0
	F	680	79.3	1416	82.7	1575	82.1	3716	82.0
Med. tech.	M	3904	29.2	2667	26.0	4167	26.6	10738	27.4
	F	9462	70.8	7588	74.0	11470	73.4	28520	72.6

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Table 4.5 Gender distribution of college and university undergraduate students by field of study and academic year (cont'd)

		Year							
Field of Study	Sex	1975-1976		1980-1981		1985-1986		Total	
		No.	%	No.	%	No.	%	No.	%
Medicine	M	2330	53.1	3324	47.5	3793	42.9	9447	46.7
	F	2055	46.9	3680	52.5	5051	57.1	10786	53.3
Physo. Thrpy.	M	14	40.0	391	35.4	1114	36.1	1519	36.0
	F	21	60.0	715	64.6	1969	63.9	2705	64.0
Engineering	M	81616	80.4	115569	77.6	145439	81.0	342624	79.7
	F	19947	19.6	33400	22.4	34066	19.0	87413	20.3
Architecture & town planning	M	6487	78.3	9491	77.7	12853	75.3	28833	76.7
	F	1796	21.7	2729	22.3	4214	24.7	9739	23.3
Transport & communication	M	844	100.0	1684	98.7	2099	97.9	4627	98.6
	F	0	0.0	22	1.3	46	2.1	68	1.4
Ag., forestry & fishery	M	6565	53.0	9394	51.0	5615	56.7	21574	53.0
	F	5829	47.0	9016	49.0	4287	43.3	19134	47.0
Arts & science	M	46116	45.0	55141	44.5	54750	37.8	156007	42.0
	F	56400	55.0	68867	55.5	89987	62.2	215254	58.0
Chemistry	M	228	10.1	229	9.4	273	18.2	730	11.8
	F	2036	89.9	2200	90.6	1225	81.8	5461	88.2
Criminology	M	9407	89.5	18173	86.4	14222	88.3	41802	87.8
	F	1099	10.5	2849	13.6	1888	11.7	5836	12.2

Not surprisingly, there is a high proportion of females enrolled in courses which provide entry to what are generally regarded as traditional female occupations education, nursing, commercial and business administration, etc. In the medical field, for example, nursing recruits 60 per cent of the students enrolled in medicine and the allied health sciences, and about 90 per cent of the nursing students are female (Table 4.5). In the Philippines, pharmacy has predominantly attracted female practitioners, and despite the replacement of the village drugstore by prepared drugs and chain outlets of large pharmaceutical companies, the number of females studying pharmacy has increased. Obviously, it seems, pharmacists are still in demand. The slight increase in the number of males going into pharmacy seems to be a result in an increase in demand for travelling pharmaceutical salesmen.

The number of females studying home economics peaked in the 1980-1981 academic year and then started to decline. However, the number of males studying home economics, though quite small, has steadily increased.

One reason why the liberal arts appeal to women is because they can use this training in order to branch into other fields, such as, law, medicine, dentistry and teaching.

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The higher proportion of female enrolment over that of males is notable in certain other fields, such as, mass communication and documentation, natural science, optometry, medical technology and physiotherapy.

Table 4.6 Gender distribution of college and university masters level students by field of study and academic year

Field of Study	Sex	Year						Total	
		1975-1976		1980-1981		1985-1986			
		No.	%	No.	%	No.	%	No.	%
Ed. & teacher training	M	2678	25.2	2009	20.0	2614	21.4	7301	22.2
	F	7929	74.8	8016	80.0	9593	78.6	25538	77.8
Hum., religion & theology	M	176	65.9	173	62.9	285	69.0	634	66.4
	F	91	34.1	102	37.1	128	31.0	321	33.6
Fine & appl. arts	M	34	30.9	331	50.5	128	35.5	493	43.7
	F	76	69.1	325	49.5	233	64.5	634	56.3
Law	M	39	67.2	21	61.8	21	70.0	81	66.4
	F	19	32.8	13	38.2	9	30.0	41	33.6
Soc. & behav. sc.	M	1258	18.8	1576	25.2	1429	24.2	4263	22.7
	F	5428	81.2	4667	74.8	4467	75.8	14562	77.3
Com. & business administration	M	1103	60.2	2457	49.7	2060	41.2	5620	47.7
	F	732	39.8	2490	50.3	2943	58.8	6165	52.3
Mass communica- tion & doc.	M	177	18.6	131	15.2	121	14.4	429	16.2
	F	774	81.4	732	84.8	720	85.6	2226	83.8
Home economics	M	-	-	-	-	2	1.1	2	0.5
	F	103	100.0	137	100.0	178	98.9	418	99.5
Service trades	M	-	-	-	-	2	22.2	2	22.2
	F	-	-	-	-	7	77.8	7	77.8
Natural science	M	46	31.1	34	19.4	39	33.9	119	27.2
	F	102	68.9	141	80.6	76	66.1	319	72.8
Maths. & computer science	M	63	38.0	48	30.4	239	45.2	350	41.0
	F	103	62.0	110	69.6	290	54.8	503	59.0
Medical & health science	M	4	3.1	36	8.2	129	23.3	169	15.1
	F	124	96.9	402	91.8	424	76.7	950	84.9
Nursing	M	1	1.9	11	4.9	1	0.8	13	3.3
	F	53	98.1	213	95.1	121	99.2	387	96.7
Pharmacy	M	1	3.7	7	12.5	1	1.8	9	6.5
	F	26	96.3	49	87.5	55	98.2	130	93.5

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Table 4.6 Gender distribution of college and university masters level students by field of study and academic year (cont'd)

Field of Study	Sex	Year							
		1975-1976		1980-1981		1985-1986		Total	
		No.	%	No.	%	No.	%	No.	%
Med. tech.	M	2	8.3	5	22.7	1	20.0	8	15.7
	F	22	91.7	17	77.3	4	80.0	43	84.3
Engineering	M	33	86.8	53	75.7	9	26.5	95	66.9
	F	5	13.2	17	24.3	25	73.5	47	33.1
Architecture & town planning	M	3	33.3	12	70.6	17	89.5	32	71.1
	F	6	66.7	5	29.4	2	10.5	13	28.9
Ag., forestry & fishery	M	15	83.3	237	47.9	73	61.3	325	51.4
	F	3	16.7	258	52.1	46	38.7	307	48.6
Chemistry	M	3	4.3	11	9.8	8	7.1	22	7.5
	F	67	95.7	101	90.2	105	92.9	273	92.5
Criminology	M	20	80.0	28	80.0	21	80.8	69	80.2
	F	5	20.0	7	20.0	5	19.2	17	19.8

Masters students. The undergraduate picture is repeated at the masters level, though on a much smaller scale. Table 4.6 reveals that as with the bachelors level, there are more males taking masters courses in humanities, religion and theology, law, engineering, agriculture, forestry and fishery and criminology. In the field of business administration, there were more males in 1975. In 1980-1981 there was a steep increase for both sexes, and by 1985-1986, the women had outstripped the men by more than 900 enrollees. In engineering, too, the males predominated in 1975-1976 and in 1980-1981, but by 1985-1986, there were 25 female masters level engineering students compared to nine males. It is likely that this increase in the number of female engineering students occurred in the field of chemical engineering.

The large number of female masters level enrollees in the educational sciences and the social and behavioural sciences are undoubtedly related to the field of teaching and educational administration and supervision. The large number of male enrollees in both disciplines is also notable. A masters degree is required for teaching in colleges and is also a prerequisite for taking the superintendent examination. A doctoral degree is required for teaching at both the masters and doctoral levels.

In mathematics and computer science, populated mostly by females in 1975-1976 and in 1980-1981, the number of male students increased dramatically in 1985-1986, with only 51 more female enrollees than males in that academic year. More opportunities for computer related employment, especially in business and industry, undoubtedly accounted for the increase in enrolment. With a rise in

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student demand there will also be a need for more instructors in these fields. Instructors in these fields must have masters degrees.

Doctoral students. There is a preponderance of female doctoral students in the fields of education, science, and teacher-training; social and behavioural sciences; mass communication and documentation; natural science; mathematics and computer science; and chemistry. With regard to 1985-1986 figures, it is only in humanities, religion and theology, law, and agriculture, forestry and fishery that the number of male doctoral students exceeds the number of female doctoral students (Table 4.7). The absence of figures from the University of the Philippines in Diliman and in Los Banos should be noted.

Table 4.7 Gender distribution of college and university doctoral level students by field of study and academic year

Field of Study	Sex	Year							
		1975-1976		1980-1981		1985-1986		Total	
		No.	%	No.	%	No.	%	No.	%
Education & teacher training	M	133	28.1	305	34.7	369	30.4	807	31.5
	F	340	71.9	574	65.3	843	69.6	1757	68.5
Hum., religion & theology	M	9	90.0	16	72.7	10	71.4	35	76.1
	F	1	10.0	6	27.3	4	28.6	11	23.9
Law	M	10	90.9	13	81.3	10	83.3	33	84.6
	F	1	9.1	3	18.7	2	16.7	6	15.4
Soc. & behav. sc.	M	23	31.5	94	45.0	110	48.5	227	44.3
	F	53	68.5	115	55.0	117	51.5	285	55.7
Com. & business administration	M	19	70.4	46	68.7	40	44.0	105	56.8
	F	8	29.6	21	31.3	51	56.0	80	43.2
Mass communication & doc.	M	16	41.0	4	17.4	3	33.3	23	32.4
	F	23	59.0	19	82.6	6	66.7	48	67.6
Natural science	M	2	40.0	2	22.2	2	28.6	6	28.6
	F	3	60.0	7	77.8	5	71.4	15	71.4
Maths. & computer science	M	4	36.4	8	44.4	1	10.0	13	32.5
	F	7	63.6	11	55.6	9	90.0	27	67.5
Medical & health science	M	-	-	-	-	-	-	-	-
	F	-	-	3	100.0	-	-	3	100.0
Pharmacy	M	-	-	-	-	-	-	-	-
	F	-	-	3	100.0	-	-	3	100.0
Ag., forestry & fishery	M	-	-	-	-	9	60.0	9	60.0
	F	-	-	-	-	6	40.0	6	40.0
Chemistry	M	2	66.7	-	-	-	-	2	10.5
	F	1	33.3	1	100.0	15	100.0	17	89.5

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Regional enrolment pattern

There are no exact figures on the number of female students who come from urban and rural environment. The percentages were derived from the replies to the item in the questionnaire which asked for the percentage of female rural and urban enrolment (Table 4.8). The figures in Table 4.8 are expressed as proportions of all enrolment.

Table 4.8 Percentage* of female students from urban and rural backgrounds by region and academic year

Region	1975 - 1976	1980 - 1981	1985 - 1986
Region I			
Urban	14.97	14.94	17.52
Rural	46.51	41.56	38.27
Region II			
Urban	18.20	18.99	19.77
Rural	40.52	44.65	45.06
Region III			
Urban	28.10	29.39	35.35
Rural	27.48	29.12	30.15
Region IV			
Urban	23.63	27.21	25.96
Rural	43.79	39.71	41.81
Region V			
Urban	31.97	32.83	31.29
Rural	28.04	56.86	31.00
Region VI			
Urban	23.69	26.29	24.01
Rural	39.46	38.86	38.31
Region VII			
Urban	18.73	21.80	22.27
Rural	31.43	34.64	35.45
Region VIII			
Urban	10.40	11.27	10.16
Rural	54.68	52.29	50.86
Region IX			
Urban	14.66	21.46	23.33
Rural	40.86	32.47	33.75
Region X			
Urban	6.82	7.13	9.12
Rural	52.83	50.15	48.92
Region XI			
Urban	17.23	18.00	18.69
Rural	52.88	53.45	51.59

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Table 4.8 Percentage* of female students from urban and rural backgrounds by region and academic year (cont'd)

Region	1975 - 1976	1980 - 1981	1985 - 1986
Region XII			
Urban	21.49	20.79	20.04
Rural	45.92	43.33	45.85
NCR			
Urban	27.90	27.44	31.48
Rural	28.41	34.52	29.90

*As a percentage of all students
For names of regions see Table 4.1

In most regions a substantially higher proportion of female students have rural rather than urban backgrounds. In Region III there was only a slight difference between the rural and urban students in 1975-1976 and 1980-1981. But in 1985-1986 the difference went to 5.2 per cent (urban over the rural). In Region V the rural enrolment was lower than the urban in 1975-1976 but rose to 56.8 per cent in 1980-1981. In 1985-1986 they were almost equal. NCR, which is the National Capital Region, and where the better universities are situated, had more rural female students in 1975-1976 and in 1980-1981 (28.4 per cent rural to 27.9 per cent urban and 34.5 per cent rural to 27.4 per cent urban in each period respectively).

NCR is an urban setting and the presence of more rural than urban female college students in the area is brought about by the 'pull' factor of its universities. Consequently, notwithstanding the high cost of education in Metropolitan Manila, the more affluent rural parents send their children to NCR higher education, thus increasing the percentage of rural female college students in this region.

In 1985-1986, however, the female college enrolment in Metropolitan Manila decreased to 29.9 per cent rural compared to 31.5 per cent urban. One possible explanation is that females from rural sections who came to Manila to study in 1975-1976 and 1980-1981 returned to study in colleges in the rural areas in 1985-1986. This may have been brought about by the decongestion policy of the government which encouraged the dispersion of institutions of higher learning to the countryside. Also, urban problems and the consistently spiralling cost of living in Metropolitan Manila may have been factors which prompted rural parents to transfer their children to colleges in the rural areas. The increase in the proportion of urban female students also may be due to a general increase in population in Metropolitan Manila.

Graduates

With respect to the distribution of graduates by field of study, sex and year, the figures in Table 4.9 show that there was a higher proportion of female graduates

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Table 4.9 Gender distribution of college and university graduates by field of study and academic year

Field of Study	Sex	Year					
		1975-1976		1980-1981		1985-1986	
		No.	%	No.	%	No.	%
Ed. & teacher training	M	1071	13.4	1077	14.4	2005	12.2
	F	6911	86.6	6416	85.6	14483	87.7
Hum., religion & theology	M	3	30.0	14	48.3	38	63.3
	F	7	70.0	15	51.7	22	36.7
Fine & appl. arts	M	21	12.7	24	9.0	47	11.6
	F	144	87.3	243	91.0	360	88.4
Law	M	458	80.6	524	73.9	702	66.5
	F	110	19.4	185	26.1	354	33.5
Soc. & behav. sc.	M	28	7.5	48	5.9	212	27.5
	F	346	92.5	769	94.1	558	72.5
Com. & business administration	M	8973	30.1	8603	23.6	10078	21.1
	F	20824	69.9	27893	76.4	37752	78.9
Mass communication & doc.	M	1	20.0	5	22.7	4	8.2
	F	4	80.0	17	77.3	45	91.8
Home economics	M	86	13.1	9	0.9	14	3.0
	F	573	86.9	943	99.1	452	97.0
Service trades	M	-	-	-	-	2	0.5
	F	120	100.0	214	100.0	407	99.5
Natural science	M	63	52.1	122	41.1	161	37.5
	F	58	47.9	175	58.9	268	62.5
Maths. & computer science	M	5	71.4	15	78.9	39	31.0
	F	2	28.6	4	21.1	87	69.0
Medical & health science	M	1093	13.0	1531	12.5	1616	19.4
	F	7344	87.0	10690	87.5	6721	80.6
Dentistry	M	6	18.8	60	30.6	281	20.6
	F	26	81.2	136	69.4	1082	79.4
Nursing	M	626	9.8	760	7.8	427	11.2
	F	5781	90.2	8962	92.2	3380	88.8
Pharmacy	M	21	7.3	24	6.4	17	4.3
	F	265	92.7	349	93.6	383	95.7
Optometry	M	5	12.0	21	10.0	29	13.4
	F	44	88.0	188	90.0	187	86.6
Med. tech.	M	249	18.6	323	30.4	334	25.1
	F	1090	81.4	741	69.6	996	74.9
Medicine	M	185	57.3	324	53.4	487	43.1
	F	138	42.7	283	46.6	639	56.9
Physio. Therpy.	M	-	-	19	38.0	44	44.9
	F	-	-	31	62.0	54	55.1
Engineering	M	7667	89.5	10619	83.9	10536	75.9
	F	916	10.5	2038	16.1	3337	24.1

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Table 4.9 Gender distribution of college and university graduates by field of study and academic year (cont'd)

Field of Study	Sex	Year							
		1975-1976		1980-1981		1985-1986		Total	
		No.	%	No.	%	No.	%	No.	%
Architecture & town planning	M	156	56.5	241	59.7	573	63.3	970	61.2
	F	121	43.5	163	40.3	332	36.7	616	38.8
Transport & communication	M	25	100.0	88	92.6	52	50.0	165	73.7
	F	-	-	7	7.4	52	50.0	59	26.3
Ag., forestry & fishery	M	590	58.0	993	41.6	725	46.6	2308	46.5
	F	427	42.0	1393	58.4	832	53.4	2652	53.5
Arts & science	M	2806	40.1	2596	32.3	3780	29.9	9182	48.8
	F	4189	59.9	5445	67.7	8876	70.1	9634	51.2
Chemistry	M	27	2.0	31	7.9	58	22.1	116	11.5
	F	331	98.0	360	92.1	204	77.9	895	88.5
Criminology	M	682	93.0	845	83.4	918	87.5	2445	87.5
	F	51	7.0	168	16.6	131	12.5	350	12.5

than male graduates in the fields of education, fine and applied arts, business administration, mass communication and documentation, home economics, natural science, dentistry, nursing, pharmacy, optometry, medical technology, chemistry, social and behavioural sciences, physiotherapy and service trades.

There was a higher percentage of male graduates than female graduates in the fields of engineering, law, architecture and town planning, and criminology in all years of study.

In natural science, males, in terms of proportion of graduates, had a slight edge over females in 1975-1976, but the females surpassed the males in 1980-1981 and 1985-1986.

In mathematics and computer science, the graduates were few in number, and the males outnumbered the females in 1975-1976 and 1980-1981, but the females surpassed them in 1985-1986 in the proportion of more than two to one. In medicine, too, the male graduates outnumbered the females in 1975-1976 and 1980-1981 but by 1985-1986 female medical graduates outnumbered the males.

In agriculture, forestry and fishery, male graduates outnumbered the females in 1975-1976, but by 1980-1981 more female than male graduates began to appear in this field.

The data seem to indicate that female graduates predominate in the majority of fields of study and even in the few in which males initially outnumbered the females, the situation was reversed by 1985-1986. The females seem to be continuously exploring areas which used to be traditionally regarded as male preserves.

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It is only in engineering, law, architecture and town planning, and criminology that male graduates outnumber their female colleagues.

Academic performance

The number of female students receiving scholarships, awards and academic honour was consistently higher than that for male students in all fields of study, except in law and engineering, which are male dominated professions (Table 4.10).

Table 4.10 Gender distribution of recipients of scholarships, academic awards and honours by field of study and academic year

Field of Study	Sex	Year							
		1975-1976		1980-1981		1985-1986		Total	
		No.	%	No.	%	No.	%	No.	%
Ed. & teacher training	M	22	16.1	17	16.3	32	17.7	71	16.8
	F	115	83.9	87	83.7	149	82.3	351	83.2
Hum., religion & theology	M	-	-	-	-	3	75.0	3	60.0
	F	-	-	1	100.0	1	25.0	2	40.0
Fine & appl. arts	M	-	-	-	-	-	-	-	-
	F	-	-	4	100.0	11	100.0	15	100.0
Law	M	7	53.8	12	50.0	16	55.2	35	53.0
	F	6	46.2	12	50.0	13	44.8	31	47.0
Soc. & behav. sc.	M	1	6.3	-	-	6	30.0	7	12.7
	F	15	93.7	19	100.0	14	70.0	48	87.3
Com. & business administration	M	81	24.8	79	20.4	111	19.8	271	21.4
	F	245	75.2	309	79.6	451	80.2	1005	78.6
Mass communication & doc.	M	1	50.0	-	-	-	-	1	16.7
	F	1	50.0	1	100.0	4	100.0	6	83.3
Home economics	M	-	-	-	-	1	25.0	1	6.7
	F	3	100.0	8	100.0	3	75.0	14	93.3
Service trades	M	-	-	-	-	-	-	-	-
	F	22	100.0	24	100.0	18	100.0	64	100.0
Natural science	M	3	37.5	4	25.0	2	25.0	9	28.1
	F	5	62.5	12	75.0	6	75.0	23	71.8
Maths. & computer science	M	-	-	-	-	-	-	-	-
	F	-	-	-	-	1	100.0	1	100.0
Medical & health science	M	14	11.7	30	24.8	37	24.7	81	20.7
	F	106	88.3	91	75.2	113	75.3	310	79.3
Dentistry	M	-	-	1	100.0	-	-	1	25.0
	F	-	-	-	-	3	100.0	3	75.0
Nursing	M	-	-	3	5.4	4	7.1	7	4.2
	F	55	100.0	53	94.6	52	92.9	160	95.8

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Table 4.10 Gender distribution of recipients of scholarships, academic awards and honours by field of study and academic year (cont'd)

		Year							
Field of Study	Sex	1975-1976		1980-1981		1985-1986		Total	
		No.	%	No.	%	No.	%	No.	%
Pharmacy	M	7	43.8	1	9.1	-	-	8	22.9
	F	9	56.2	10	90.9	8	100.0	27	77.1
Optometry	M	-	-	-	-	-	-	-	-
	F	-	-	3	100.0	3	100.0	6	100.0
Med. tech.	M	3	7.7	10	38.5	23	36.5	36	28.1
	F	36	92.3	16	61.5	40	63.5	92	71.9
Medicine	M	4	40.0	15	62.5	10	58.8	39	63.9
	F	6	60.0	9	37.5	7	41.2	22	36.1
Engineering	M	21	87.5	40	72.7	99	79.2	160	78.4
	F	3	12.5	15	27.3	26	20.8	44	21.6
Architecture & town planning	M	-	-	1	16.7	10	45.5	11	35.5
	F	3	100.0	5	83.3	12	54.5	20	64.5
Transport & communication	M	-	-	1	33.3	-	-	1	33.3
	F	-	-	2	66.7	-	-	2	66.7
Ag., forestry & fishery	M	6	60.0	12	34.3	9	42.9	27	40.9
	F	4	40.0	23	65.7	12	57.1	39	59.1
Arts & science	M	47	30.9	34	20.0	83	30.4	164	27.6
	F	105	69.1	136	80.0	190	69.6	431	72.4
Chemistry	M	-	-	-	-	-	-	-	-
	F	7	100.0	8	100.0	1	100.0	16	100.0
Criminology	M	3	50.0	6	50.0	5	50.0	14	50.0
	F	3	50.0	6	50.0	5	50.0	14	50.0

Even in law, however, the sexes were running neck and neck, so to speak, with 35 male to 31 female awardees. The gap was wider in engineering with 160 male as against 44 female awardees.

The female awardees substantially outnumbered their male colleagues in education and teacher training, social and behavioural sciences, commerce and business administration, and, in general, liberal education.

Surprisingly, in architecture and town planning, agriculture, forestry and fishery, the awards went mostly to women, even though there were less women than men enrolled for these courses.

Board examinations. Performance in state board examinations conducted by the Professional Regulation Commission (PRC) is usually regarded as an index to the standard of the colleges/universities. However, results are listed alphabetically by candidate, without regard to sex or institutional origin. For the purpose of this study, the files had to be examined individually in order to determine the sex of

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those who passed. (Recently, the Commission changed the procedure and now candidates are listed by sex).

Among those who passed the Certified Public Accountancy (CPA) examination in 1975-1976 the females' share was a comparatively low 39.7 per cent, but by 1980-1981 they were only 1.6 per cent shy of being equal to the number of males who passed the examination, and in 1985-1986 about two-thirds of those candidates who passed the CPA examination were female (Table 4.11). The CPA examination is quite demanding, evidenced by an annual 60 to 80 per cent failure rate.

Table 4.11 Gender distribution of graduates who passed the Board Examination by type of examination* and academic year

		Year							
Type of exam.	Sex	1975-1976		1980-1981		1985-1986		Total	
		No.	%	No.	%	No.	%	No.	%
Certified public accountant	M	1103	60.3	1675	50.8	1504	33.5	4282	44.6
	F	726	39.7	1620	49.2	2981	66.5	5327	55.4
Dentistry	M	97	34.0	257	31.6	616	39.3	970	36.4
	F	188	66.0	557	68.4	950	60.7	1695	63.6
Medicine	M	524	39.0	204	16.0	851	44.9	1579	35.0
	F	821	61.0	1069	84.0	1044	55.1	2934	65.0
Optometry	M	95	52.2	85	34.6	162	61.1	342	49.4
	F	87	47.8	161	65.4	103	38.9	351	50.6
Medical Tech.	M	453	33.1	236	23.8	335	32.9	1024	30.3
	F	915	66.9	755	76.2	682	67.1	2352	69.7

*Bar examination results are not included because the Supreme Court conducts these examinations.

If looked at over the ten year period, it can be seen that the female pass rate (*vis a vis* that of males) on the optometry examination was somewhat variable: 47.8 per cent in 1975, a high 65.4 per cent in 1980 and a low of 38.9 per cent in 1985. With regard to the dentistry and medical technology examinations, at each five-year interval, over 60 per cent of those who passed were female. Female performance *vis a vis* that of male candidates on the medical board examination was also variable: a high 84 per cent pass rate in 1980, which fell to 55.1 per cent in 1985. In terms of average female/male pass rates over the ten year period, females achieved a high of 69.7 per cent in medical technology and a low of 50.6 per cent in optometry.

Teachers/researchers

In the 1985-1986 academic year over the 13 regions there was a total of 17,147 (59.8 per cent) female college and university teachers and 11,509 (40.2 per cent) male college and university teachers. (It should be mentioned that some institutions indicated only the total number of teachers instead of classifying them by sex).

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The gender distribution of the teaching force by different areas of specialization, as depicted in Table 4.12, generally conforms to that of student enrolment. Thus in education, social and behavioural sciences, commercial and business administration, home economics, natural science, dentistry, nursing, pharmacy, optometry, medical technology, arts and sciences, and chemistry, there were more female teachers than male teachers. Predictably, there were more male than female teachers in the fields of law, engineering, fine and applied arts, criminology, architecture and town planning, and agriculture, forestry and fishery. Surprisingly, in mathematics and computer science 73 per cent of the teachers were female.

Table 4.12 Gender distribution of college and university teaching staff by field of study and academic year

		Year							
Field of Study	Sex	1975-1976		1980-1981		1985-1986		Total	
		No.	%	No.	%	No.	%	No.	%
Ed. & teacher training	M	1129	31.8	1340	29.1	1524	28.4	3993	29.5
	F	2421	68.2	3236	70.9	3836	71.6	9520	70.5
Hum., religion & theology	M	4	50.0	17	70.8	36	43.4	57	49.6
	F	4	50.0	7	29.2	47	56.6	58	50.4
Fine & appl. arts	M	40	49.4	72	53.7	66	52.0	176	51.8
	F	41	50.6	62	46.3	61	48.0	164	48.2
Law	M	435	91.6	538	88.2	667	88.2	1640	89.1
	F	40	8.4	72	11.8	89	11.8	201	10.9
Soc. & behav. sc.	M	14	24.6	23	18.3	15	9.0	52	14.9
	F	43	75.4	103	81.7	151	91.0	297	85.1
Com. & business administration	M	1320	41.7	2149	44.5	2262	41.1	5731	42.5
	F	1845	58.3	2676	55.5	3235	58.9	7756	57.5
Home economics	M	8	4.1	28	8.8	21	6.4	57	6.8
	F	187	95.9	291	91.2	305	93.6	783	93.2
Service trades	M	-	-	-	-	1	50.0	1	50.0
	F	-	-	-	-	1	50.0	1	50.0
Natural science	M	17	48.6	39	37.9	36	27.5	92	34.2
	F	18	51.4	64	62.1	95	72.5	177	65.8
Maths. & computer science	M	11	30.6	9	24.3	10	26.3	30	27.0
	F	25	69.4	28	75.7	28	73.7	81	73.0
Medical & health science	M	403	26.0	471	25.2	966	32.4	1840	28.7
	F	1149	74.0	1398	74.8	2016	67.6	4563	71.3
Dentistry	M	11	34.4	21	30.4	171	52.7	209	48.2
	F	21	65.6	48	69.6	156	47.3	225	51.8
Nursing	M	76	9.2	86	9.3	106	8.9	268	9.1
	F	747	90.8	838	90.7	1084	91.1	2669	90.9

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Table 4.12 Gender distribution of college and university teaching staff by field of study and academic year (cont'd)

Field of Study	Sex	Year							
		1975-1976		1980-1981		1985-1986		Total	
		No.	%	No.	%	No.	%	No.	%
Pharmacy	M	18	12.8	24	13.3	31	13.5	73	13.3
	F	123	87.2	156	86.7	198	86.5	477	86.7
Optometry	M	5	33.3	12	37.5	13	32.5	30	34.5
	F	10	66.7	20	62.5	27	67.5	57	65.5
Med. tech.	M	35	25.4	38	23.8	39	21.9	112	23.5
	F	103	74.6	122	76.2	139	78.1	364	76.5
Medicine	M	258	64.0	286	58.0	600	59.6	1144	60.1
	F	145	36.0	207	42.0	407	40.4	759	39.9
Physo. Thrpy.	M	-	-	4	36.4	6	54.5	10	45.5
	F	-	-	7	63.6	5	45.5	12	54.5
Engineering	M	1055	73.5	1691	70.0	2255	67.4	5001	69.5
	F	381	26.5	723	30.0	1090	32.6	2194	30.5
Architecture & town planning	M	123	76.9	129	73.3	129	70.1	381	73.3
	F	37	23.1	47	26.7	55	29.9	139	26.7
Transport & communication	M	5	83.3	3	50.0	2	50.0	10	62.5
	F	1	16.7	3	50.0	2	50.0	6	37.5
Ag., forestry & fishery	M	136	69.0	294	64.2	339	59.8	769	62.9
	F	61	31.0	164	35.8	228	40.2	453	37.1
Arts & science	M	1238	39.6	1774	38.3	1976	35.7	5009	37.5
	F	1891	60.4	2896	61.7	3553	64.3	8340	62.5
Chemistry	M	27	20.8	49	19.4	45	15.4	121	17.9
	F	103	79.2	204	80.6	248	84.6	555	82.1
Criminology	M	151	67.7	168	65.6	193	68.0	512	67.1
	F	72	32.3	88	34.4	91	32.0	251	32.9

The distribution of teaching rank by gender is displayed in Table 4.13.

Insofar as teaching ranks are concerned, the female instructors dominate the base of the educational pyramid. They outnumbered the men by almost 20 per cent in 1975-1976 and 1980-1981, and by slightly more than 20 per cent in 1985. Though overall there are far fewer assistant professors than instructors, the females still predominate: about 10 per cent more female than male assistant professors in 1975-1976, rising to almost 14 per cent more female than male assistant professors in 1985-1986. Also, the same general pattern occurred at the associate professor level. Among the full professors, the females outnumbered the males by less than 3 per cent in 1975-1976; after five years, the sexes were almost equal in number, but by 1985-1986 the female full professors outnumbered the males by 31 per cent.

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Table 4.13 Gender distribution of college and university teaching staff according to academic rank

		Year							
Academic Rank	Sex	1975-1976		1980-1981		1985-1986		Total	
		No.	%	No.	%	No.	%	No.	%
Instructor	M	2545	40.5	3879	40.5	4983	39.8	11407	40.2
	F	3732	59.5	5711	59.5	7527	60.2	16970	59.8
Assistant Prof.	M	582	45.1	890	44.1	1310	43.1	2782	43.8
	F	708	54.9	1129	55.9	1729	56.9	3566	56.2
Associate Prof.	M	273	45.1	437	43.8	639	42.9	1349	43.6
	F	332	54.9	561	56.2	849	57.1	1742	56.4
Professor	M	386	48.6	493	49.9	1037	34.4	1916	42.6
	F	408	51.4	495	50.1	1980	65.6	2583	57.4
Lecturer	M	405	51.3	643	54.9	568	54.0	1616	53.6
	F	385	48.7	529	45.1	484	46.0	1398	46.3

The lectures belong to a different category. They are either specialists or part-time teachers holding various ranks. The men outnumbered the women in all the years of study, by almost as much as 10 per cent in 1980-1981. These lecturers go from one college to another to teach their specialties. Possibly, female teachers prefer more stable forms of employment.

Incentives and opportunities

Of the fringe benefits and privileges enjoyed by teachers as listed in Table 4.14, maternity leave, which is mandatory by law, ranks first. Sick leave and vacation

Table 4.14 Frequency distribution of fringe benefits, privileges and support facilities

Benefits/privileges	Frequency	Rank
Maternity leave	294	1
Sick leave	266	2
Vacation leave	225	5
Retirement	265	3
Death benefit	130	9
Hospitalization	133	8
Educational benefit	223	6
Day care services for children	9	12
Tuition fee discount for graduate studies	145	7
Subsidy for attendance in workshops/seminars	229	4
Hardship pay	21	11
Other	39	10
Total	1979	

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leave are mandated by law in recognition of the health needs of employees. Retirement benefits are rewards for past service. Subsidies for attendance in workshops/seminars form part of the faculty development incentives. Both death and hospitalization benefits occur less frequently than many other benefits, and the least occurring benefit is day care services for children.

Adverse policies

About 75 per cent of the colleges and universities require advanced degrees for entry into the higher education teaching profession (Table 4.15). This is a most important policy requirement. Another policy adopted by many colleges and universities is that new members of faculty must be under 40 years of age. The civil status (married/unmarried) does not seem to substantially affect policy.

Table 4.15 Percentage distribution of entry and policy requirements which may restrict appointment of female teachers

Requirements	Entry		Policy	
	No.	%	No.	%
Lack of advanced degrees (MA/Doctoral)	133	48.7	170	74.9
Civil status (married women are not considered)	28	10.3	13	5.7
Age (no appointment beyond 40 years)	80	29.3	20	8.8
Other	32	11.7	24	10.6
Total	273	100.0	227	100.0

Research and service opportunities. Table 4.16 shows that student advising is performed by 41 per cent of the female teachers. Community outreach and directing co-curricular activities come next and research is last. Student advising and

Table 4.16 Distribution of females engaged in research and service activities

Incentives/opportunities	No.	%
Research	841	16.3
Community outreach	1105	21.4
Student advising	2115	41.0
Directing co-curricular activities	1097	21.3
Total	5158	100.0

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directing co-curricular activities are connected with teaching functions. Community outreach enables teachers to socialize with non-teachers and gives them opportunity to link up with other organizations. Research is a difficult and expensive task, and requires a lot of planning and special expertise.

Demographic profile of teachers

The younger members of the academic teaching force are predominantly female (Table 4.17). At both the 20-29 years old and 30-39 years old age brackets, the percentage of staff who are female is well over 60 per cent. With increasing age, the female/male ratio of teaching staff approaches 50/50. There are more male than female teachers who are 70 years old and above. In the public college and university sector, the official retirement age is 65; in the private sector, there is more flexibility, although the government age limit is usually adopted. However, there is no age limit on the position of lecturer, especially with regard to lecturers involved with courses that require specialist skills and knowledge. The peculiar functions ascribed to the lecturer category and the need for lecturers to travel from one institution to another (see above), may help explain why there are more male than female teachers 70 years old and above.

Table 4.17 Gender distribution of college and university teaching staff according to age

Age Interval	Sex	Year						Total	
		1975-1976		1980-1981		1985-1986		No.	%
		No.	%	No.	%	No.	%		
20 - 29	M	885	32.7	1418	36.0	2059	37.8	4362	36.1
	F	1824	67.3	2516	64.0	3385	62.2	7725	63.9
30 - 39	M	1240	38.4	1977	38.1	3044	37.1	6261	37.7
	F	1987	61.6	3218	61.9	5151	62.9	10356	63.3
40 - 49	M	1059	46.7	1438	43.2	2166	40.1	4663	42.4
	F	1208	53.3	1891	56.8	3229	59.9	6328	57.6
50 - 59	M	593	48.5	871	48.9	1427	45.3	2891	47.0
	F	630	51.5	909	51.1	1721	54.7	3260	53.0
60 - 69	M	178	53.6	257	51.7	538	48.0	973	49.9
	F	154	46.4	240	48.3	584	52.0	978	50.1
70 & above	M	33	73.3	63	69.2	107	61.5	203	65.5
	F	12	26.7	28	30.8	67	38.5	107	34.5

While the majority of the members of the teaching force were married, it is interesting to note that of those teachers who were never married, about one-third were male and approximately two-thirds were female (Table 4.18). This may indicate that avoidance of marriage and family responsibilities for the sake of career, are more important problems for women than for men.

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Over the ten-year period examined, the number of divorces seems to have increased for both sexes, but at a substantially higher rate for women than for men. This may indicate that the social stigma attached to divorced women may be disappearing and that women are becoming less tolerant of adverse marital relationships.

As one might expect, due to their greater longevity, a much larger proportion of women than men were widowed.

Table 4.18 Gender distribution of college and university teaching staff according to civil status

		Year							
Civil Status	Sex	1975-1976		1980-1981		1985-1986		Total	
		No.	%	No.	%	No.	%	No.	%
Never Married	M	910	32.1	1426	35.0	2355	36.6	4691	35.1
	F	1923	67.9	2651	65.0	4088	63.4	8662	64.9
Married	M	2860	44.2	3959	43.0	6501	41.9	13320	42.7
	F	3611	55.8	5252	57.0	9032	58.1	17895	57.3
Divorced/sep.	M	7	46.7	13	39.4	15	22.7	35	30.7
	F	8	53.3	20	60.6	51	77.3	79	69.3
Widowed	M	54	36.7	59	23.2	106	25.3	219	28.3
	F	93	63.3	150	76.8	313	74.7	556	71.7

In terms of years of service, there was a higher proportion of female than male teachers at each length of service interval (Table 4.19). For example, with respect to the 1985-1986 academic year, about 59 per cent of the teachers who had been employed for between one and five years were female, of those employed for between six and ten years, about 60 per cent were female, of those employed for between 11 and 15 years, 64 per cent were female, and so on.

Table 4.19 Gender distribution of college and university teaching staff according to length of service

		Year							
Length of Service	Sex	1975-1976		1980-1981		1985-1986		Total	
		No.	%	No.	%	No.	%	No.	%
1 - 5 years	M	1767	39.0	2884	40.1	4032	41.4	8683	40.4
	F	2759	61.0	4309	59.9	5713	58.6	12781	59.6
6 - 10 years	M	1130	43.2	1504	38.5	2554	40.2	5188	40.3
	F	1483	56.8	2400	61.5	3806	59.8	7689	59.7
11 - 15 years	M	651	42.7	899	40.2	1282	35.9	2832	38.6
	F	873	57.3	1338	59.8	2287	64.1	4498	61.4
16 - 20 years	M	310	42.2	484	38.8	902	39.6	1696	39.8
	F	425	57.8	763	61.2	1378	60.4	2566	60.2

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Table 4.19 Gender distribution of college and university teaching staff according to length of service (cont'd)

Length of Service	Sex	Year						Total	
		1975-1976		1980-1981		1985-1986			
		No.	%	No.	%	No.	%	No.	%
21 - 25 years	M	194	43.2	265	39.3	502	37.3	961	38.9
	F	255	56.8	409	60.7	844	62.7	1508	61.1
26 - 30 years	M	98	39.5	171	37.8	295	39.5	564	39.0
	F	150	60.5	281	62.2	451	60.5	882	61.0
31 - 40 years	M	53	58.9	74	33.9	215	39.0	342	39.8
	F	37	41.1	144	66.1	337	61.0	518	60.2
41 - 50 years	M	17	54.8	16	44.4	23	46.0	56	47.9
	F	14	45.2	20	55.6	27	54.0	61	52.1
51 years & above	M	37	34.9	62	42.5	68	41.0	167	40.0
	F	69	65.1	84	57.5	98	59.0	251	60.0

As far as educational qualifications are concerned, the females appear to be consistently better qualified than the males (Table 4.20).

Table 4.20 Gender distribution of college and university teaching staff according to educational qualifications

Qualification	Sex	Year						Total	
		1975-1976		1980-1981		1985-1986			
		No.	%	No.	%	No.	%	No.	%
Bachelor degree	M	2306	45.3	3166	44.1	4422	43.4	9894	43.6
	F	3024	56.7	4021	55.9	5760	56.6	12805	56.4
Bachelor degree & master units	M	1069	37.2	1877	36.5	2909	35.1	5855	35.9
	F	1806	62.8	3272	63.5	5368	64.9	10446	64.1
Master degree	M	651	37.3	990	39.2	1634	36.8	3275	37.6
	F	1092	62.7	1537	60.8	2801	63.2	5436	62.4
Master degree & doctoral units	M	111	40.8	205	36.2	347	32.4	663	34.7
	F	161	59.2	361	63.8	723	67.6	1245	65.3
Doctoral degree	M	138	48.3	187	47.8	503	42.4	830	44.5
	F	148	51.7	206	52.2	682	57.6	1036	55.5

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Looking cumulatively over the ten-year period being examined, it can be seen that 56.4 per cent of the bachelor degree holders were female and 43.6 per cent were male. With regard to those teachers who had bachelor degrees with some master level units and those with full master degrees, more than 60 per cent were female. Amongst those teachers with Ph.D.s, more than 55 per cent were female. It is important to note that both in proportional and actual terms, the number of female doctoral degree holders increased over the ten-year period of study.

Administrators/policy-makers

In the survey of higher education institutions, the question was asked: "How many females are members of your highest policy-making/governing bodies (board of directors, academic council or its equivalent)?" The combined replies totalled: 1975-1986 = 981; 1980-1981 = 1,345; 1985-1986 = 1,749. Clearly, the number of women participating in the governance of higher education institutions is increasing.

Top administrative management positions are still dominated by men, even though the female share rose from 31.4 per cent in 1975-1976 to 36.4 per cent in 1980-1981 (Table 4.21). Between 1975-1976 and 1985-1986, the total number of top management positions occupied by females increased by nearly two-fold, from 177 in 1975 to 333 in 1985. During the 1985-1986 academic year, close to 40 per cent of the top managers in institutions of higher education were women.

Throughout the period of study, the number of males and females occupying middle-level management positions remained nearly equal (Table 4.21). However, the number of middle-level managers increased substantially between 1975-1976 and 1985-1986, from 821 male and 788 female middle managers in 1975 to 1,718 male and 1,806 female middle managers in 1985.

Table 4.21 Gender distribution of college and university administrators according to position

		Year							
Position	Sex	1975-1976		1980-1981		1985-1986		Total	
		No.	%	No.	%	No.	%	No.	%
Top management (president, vice-pres., asst. vice-president)									
	M	386	68.6	429	63.6	512	60.6	1327	63.7
	F	177	31.4	246	36.4	333	39.4	756	36.3
Middle management (academic & support heads, deans, directors)									
	M	821	51.0	1146	48.1	1718	48.8	3685	49.0
	F	788	49.0	1239	51.9	1806	51.2	3833	51.0

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Demographic profile of administrators and policy-makers. Table 4.22 discloses that there was a higher proportion of female compared to male administrators/policy-makers in the 20 years to 49 years old age brackets. The reverse was true for those administrators/policy-makers over 50 years of age. This finding is not surprising in that the trend over the last ten years has been towards a substantial increase in the number of female administrators/policy-makers who, invariably, will be younger women. Of course, during the same period, the male administrators continuing to occupy positions would have aged.

In relation to civil status, most administrators/policy-makers were married, and there is little difference between women and men in this regard. But amongst those administrators who were never married, 64 per cent were women and 36 per cent were men, a gap of 28 per cent. There were more divorced/separated men than women, unlike the previous findings in relation to teachers/researchers (see Table 4.22). The widows outnumber the widowers by two to one.

Table 4.22 Profile of administrators and policy makers

Criteria	Male		Female	
	No.	%	No.	%
AGE				
20 - 29 years	111	42.2	152	57.8
30 - 39 years	382	41.1	548	58.9
40 - 49 years	517	44.8	636	55.2
50 - 59 years	442	50.8	428	49.2
60 - 69 years	187	52.7	168	47.3
70 years and above	<u>76</u>	67.9	<u>36</u>	32.1
	1715		1968	
CIVIL STATUS				
Never married	350	36.0	623	64.0
Married	1298	51.0	1246	49.0
Divorced/separated	13	59.1	9	40.9
Widowed	<u>37</u>	29.4	<u>89</u>	70.6
	1698		1967	
YEARS OF SERVICE				
1 - 5 years	469	48.5	499	51.5
6 - 10 years	365	47.5	404	52.5
11 - 15 years	315	46.3	366	53.7
16 - 20 years	233	47.5	258	52.5
21 - 25 years	<u>272</u>	48.0	<u>295</u>	52.0
	1654		1822	
QUALIFICATION				
Bachelor degree	608	54.7	503	45.3
Bachelor degree with master units	464	42.6	626	57.4
Master degree	461	42.4	626	57.6
Master degree with doctoral units	181	40.9	262	59.1
Doctoral degree	<u>214</u>	46.8	<u>243</u>	53.2
	1928		2260	

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As to years of related service, female and male administrators distribute themselves over each five year interval in proportion to their total number.

With regard to the educational qualifications of administrators/policy-makers, of those holding bachelor degrees only, there is a higher percentage of males compared to females. But amongst the administrators with qualifications above the bachelors level, the situation was reversed (Table 4.22). For example, of the 457 administrators holding doctoral degrees, 214 (46.8 per cent) were male and 243 (53.2 per cent) were female. In terms of their respective total numbers, 78 per cent of the 2,260 female administrators/policy-makers held qualifications above the bachelors level, while only 68 per cent of the 1,928 male administrators/policy-makers could claim the same. Thus there is some evidence to suggest that female administrators/policy-makers are somewhat better educationally qualified than their male colleagues.

Women's participation in professional organizations

Educational associations abound. Mention will be made only of the co-educational organizations. PACU is an acronym for the Philippine Association of Colleges and Universities. Its members are college/university presidents. PAGE is the Philippine Association for Graduate Education, members are graduate school deans; PAFTE is the Philippine Association for Teacher Education, services teachers; APCAS stands for the Association of Philippine Colleges of Arts and Sciences; PACS is composed of Christian schools and colleges; CEAP is the Catholic Educational Association of the Philippines, and is composed of Catholic schools and colleges. NRCF stands for National Research Council of the Philippines. There is a folklore society. PDK stands for Phi Delta Kappa, a branch of the American PDK, which use to have an all-male membership. When a U.S. court decided that exclusion of women constituted sexual discrimination, female educators in the Philippines were gradually admitted.

There are also numerous alumni associations in the country, including Harvard, Columbia, Yale and other American universities and colleges.

The officers of these associations are elected either annually or semi-annually. Election to office is apparently based on performance, popularity and length of service to the association.

In at least four professional organizations, female educators out-numbered the males. There are evidently more female than male graduate school deans (PAGE) judging by the membership - 205 female to 158 male. The Philippine Association for Vocational Education (PAVE) has 178 female compared to 140 males. Philippine Associations for Teacher Education (PAFTE) has 79 female members against 67 males. Pambansang Samahan sa Sikolohiyang Pilipino (PSSP) has 40 female members against eight males.

Phi Delta Kapa (PDK) has nine male against five female board members. The Philippine Institute of Certified Public Accountants has 13 male and female board members each.

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There are exclusive women's associations which have many members, such as the Philippine Association of University Women and Phi Lambda Theta. There were also many other small, local organizations mentioned in the responses.

Identification and analysis of socio-cultural factors affecting women's participation in higher education

Many factors influence women's participation in higher education. Some factors facilitate participation while others have the opposite effect. Moreover, the factors influencing female participation in higher education do not easily fall into positive and negative categories; they interact with one another, the overall effect being difficult to analyse. This chapter will attempt to test out some of the more important factors in Filipino society that seem to affect the level and extent of female participation in higher education.

Socio-cultural

In several important respects, Filipino society holds to the norms of egalitarianism, with men and women having equal say over decisions in their respective areas of influence and responsibility. The society also places great emphasis on the sovereignty of the family and the responsibilities of motherhood. Not a few mothers have had to curtail their studies or employment in order to attend to children. On the other hand, domestic help is relatively inexpensive, and some Filipino women are able to employ nursemaids or housekeepers in order to remain engaged in activities outside the home.

Nonetheless, culturally, the economic and social role of women in the family is often seen to be secondary to that of men. For example, when the family must choose whether it is the son or daughter who is to participate in higher education, the son is often given preference. Also, it is not uncommon for sons to be given preference over daughters in the choice of the more prestigious and educationally expensive professions. Indeed, older daughters have had to be satisfied with a lower level of education and early leaving in order to gain a job to help financially support a younger brother through college.

However, it is interesting to note that research at Centro Escolar University indicates that family influence is not the most important factor in the choice of a profession. The student's own choice ranks first and parental preference ranks third. While attitudes may be changing, traditional values, family economics and parental influence remain important factors affecting the opportunity of females to participate in higher education.

Politico-economic

Politico-economic factors exercise a great influence on women's participation in higher education. During the Spanish Era, only the more affluent could enter the few formal schools where Spanish was the language of instruction. In the towns,

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there were informal schools presided over by tutors, who taught as a sideline. The *caton*, or A, B, C, textbook, enabled learners to read and write the native languages (mostly Tagalog).

The more wealthy and influential Filipino families sent their daughters to convent schools for a few years, as much for training in social skills as for scholastic education. However, teaching as a vocation was available to women, and a good number of women took advantage of this. Some of these female teachers later founded schools, one being Centro Escolar de Señoritas (Scholastic Centre for Young Ladies), now Centro Escolar University.

The American administration introduced the public school system, open to both males and females from first grade to university. With more education went rising expectations and demands by women for equality and more rights under the Civil Code with regard to such matters as conjugal and paraphernal property and custody of children.

In the past, Filipino women have tended to be more conscious of their family responsibilities than of their civil rights. But this is changing, particularly with the introduction of women into important positions of socio-political responsibility and resultant appropriate role-models. The President of the Philippines is a woman, Corazon Aquino, as is the president of the Constitutional Convention, former Justice Cecilia Muñoz-Palma. There are four female cabinet secretaries, two elected senators (out of 24), and 18 elected congressmen (out of 200).

While women have always enjoyed a degree of access to paid employment and other economic activities, it needs to be recognized that their participation has been concentrated in areas traditionally reserved for women – such as teaching and nursing – or in areas of employment that could be based within, or in connection to, the home – such as pharmacy or dentistry. Having a drugstore below or beside the house did not remove the female proprietor far from home, and many dental practices are based in the home.

With the introduction of chain-stores, the pharmaceutical industry has changed in the Philippines, and a career in pharmacy has become more attractive to men and less attractive to women. But medicine, nursing, dentistry and medical technology remain favourite career choices for women. Medicine is the most prestigious career path, but the most difficult to enter. Registration in medical colleges is limited to students who score high in the entrance examination. In the case of the College of Medicine, University of the Philippines, first year enrolment is on 50-50 basis for males and females. Entry requirements for females are more rigorous.

Ideological

Sexual stereotypes and "double standards" work against the equal participation of Filipino women in the affairs of society. The role of mother and housewife is given undue emphasis, and more moral and social restrictions are placed on daughters than on sons. Families are often highly concerned about the 'reputations' of their daughters, believing that their matrimonial marketability lessens if their moral behaviour is contrary to accepted cultural norms. While the freedom of social

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movement is more restricted for females than for males, females find other social outlets, such as, membership in civic, religious and charitable organizations. The Civic Assembly of Women, for instance, is an umbrella organization for many women's clubs. The Philippine Association of University Women caters to degree holders, but the Catholic Women's League accepts all women, provided their religion is Catholicism.

Stereotyped perceptions about women are that they are more patient, more persevering, more docile, and more careful in handling money. They are perceived not to be too assertive, disputatious, controversial, and as less argumentative. These may be some of the reasons for high female enrolment in commerce/business type courses in colleges and universities: women are perceived to make good accountants because they are meticulous, patient and pay attention to detail. Budgeting may also be seen as an extension of the wife's responsibility to balance the family budget. Moreover, because business courses are offered in the evening they allow less affluent students to seek day-time jobs.

Legal

Philippine law does not discriminate against women. Section 14, Article II of the 1986 Constitution states that "The State recognizes the role of women in nation-building, and shall ensure the fundamental equality before the law of women and men". Article XIII on Social Justice and Human Rights says that "The State shall protect working women by providing safe and healthful working conditions, taking into account their maternal function, and such facilities and opportunities that will enhance their welfare and enable them to realize their full potential in the service of the nation".

While women are given the right to *realize their full potential in the service of the nation*, the maternal function must not be overlooked. The family is safeguarded in the Constitution in two places, in the preamble and in Article II, Section 12, which states that:

The State recognizes the sanctity of family life and strengthens the family as a basic autonomous social institution. It shall equally protect the life of the mother and the life of the unborn from conception. The natural and primary right and duty of parents in the rearing of the youth for civic efficiency and the development of moral character shall receive the support of the Government.

Article XV, The Family, has four sections: recognition of the family as the foundation of the nation; recognition of marriage as an inviolable social institution; freedom of religion for spouses; and the right to a living wage and the duty to care for elderly family members. The solidarity of the family, the permanence and stability of marriage, and the protection of children are all provided for.

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While the aim of the Constitution is to recognize women as nation-builders, not just family builders, the tension for women between career goals and family responsibilities can never be totally resolved by a legal document.

Infrastructure

Various structural factors tend to inhibit female participation in such courses as law, engineering, architecture, forestry, theology and criminology. Although the number of female law students is increasing, traditionally, law has not been very attractive to Filipino women. While law is seen as a prestigious profession, it was regarded as unseemly for women to either plead cases in court or to travel the long distances that the job often required. Also, since most law students and professors were employed in the day-time and taught or studied in the evening, law was not an attractive choice for females; women, whether single or married, are expected to be at home in the evenings.

But the structure of the legal profession is changing, and new career opportunities more suitable to women have been introduced: legal researcher, fiscal law, law clerk, and judge. Presently, there are two female justices of the Supreme Court, and several judges of the Courts of First Instance are women.

Because they required travel, physical stamina and strength, careers in engineering and architecture were regarded as unsuitable for women. The same could be said for careers in agriculture, forestry, criminology and other similar professions traditionally regarded as male reserves. The number of females entering such professions is increasing. But while there are prominent and socially recognized female lawyers and doctors, nobody has proclaimed the accomplishments of female architects, engineers and foresters. Usually, female graduates in these areas are employed as assistants to their male counterparts.

Theology too has a built-in restraint to female participation. Only men can become priests, bishops, archbishops or cardinals in the Catholic religion. Women can only aspire to be missionaries, school heads, or superiors in their congregations.

Women are now entering many occupations once thought to be suitable only to men, and in so doing are challenging many traditional attitudes on what was proper and possible for them to accomplish. Progress has been made, but there is still much to be accomplished before women achieve true equality with men. One of the most significant barriers to achieving sexual equality – and one that is rapidly being broken down – is women's own attitude towards what is desirable, proper and possible.

Review of policies, programmes and strategies for the promotion of women's participation in higher education

This section provides information on significant policies, programmes and strategies designed to promote women's participation in higher education. It begins by examining some of the relevant issues that arise from the literature and then turns to a discussion of the situation in the Philippines in more detail.

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Issues arising from the literature

In 1976, the Women's Equity Action League Educational and Legal Defense Fund (WEAL FUND) published the proceeding of the Decade for Women: World Plan of Action General Assembly, which endorsed the following:

1. establishment of an international research and training institute for the advancement of women;
2. organization of training courses and seminars whereby officials responsible for national development plans would study ways to integrate women into development; and
3. increase literacy levels of women and grant them equal access to professional, technical and vocational education as well as to scholarship and other study grants and to introduce free education and co-education.

A review and appraisal of progress made in attaining the objectives of the UN Decade for Women held in 1979 in New Delhi drew conclusions from available statistics more or less consistent with those of the present study: females enjoyed a higher proportion of total enrolment than males at both the undergraduate and post-graduate levels (approximately 64 and 65 per cent respectively). Only in maritime education, law, foreign service, music and fine arts, agriculture, and engineering and technology, were there more male than female students.

Women's Education in a Rural Environment, published by Unesco ROEAP, Bangkok in 1982, offered some important observations:

1. The discrepancy between the number of male and female enrolment is widest in vocational education. Women are often trained to do semi-skilled, repetitive jobs. Technical, skilled, managerial training is absent.
2. In technical and tertiary education, women are under-represented in most countries. Female enrolment is concentrated in conventional areas such as in arts courses at the university level and in 'feminine' areas in vocational training.
3. In most countries, university education tends to be more elitist for women than for men.

The same study identified the following problems pertaining to the education of rural women:

1. *Socio-cultural problems.* Rural societies tend to be more isolated from social change thus traditional social concepts have a stronger impact on rural lifestyles. Stemming from the (traditional) image of females as homemakers, the roles ascribed to them from an early age are domestic: *household chores, marriage and child bearing.* This conception overshadows the important role of rural women as economic producers. Thus, rural females are seldom sent to school or they are compelled to leave school to be able to attend to household chores.

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Recent research indicates that parents in rural areas do not necessarily have negative attitudes to the education of their daughters. But early marriage acts as a deterrent to rural females obtaining formal education.

Socio-cultural influences lead women to believe and accept an inferior *self-image* and lower levels of *aspiration*, *motivation* and *achievement*. Lack of *self-confidence* prevents women from entering non-traditional areas in education, training and employment. A fear syndrome affects their performance in areas of supposedly male 'excellence' such as *mathematics*, *physical science*, *mechanics* and *engineering*. The image of women as 'home-makers' also precludes the acceptance of the concept of shared responsibility between men and women in *household duties* and forces on women a schedule of tasks that effectively limits their participation in educational programmes.

2. *Economic constraints.* Cost of education can be prohibitive. Where it is free, cost of textbooks, clothes, etc., often becomes a problem. Also, due to the economy of most Asian countries, which is agricultural, there is a heavy dependence on the labour of children, especially of girls. Formal schooling is often set aside so children, especially girls, can contribute to the family's earnings.
3. *Health problems.* Environmental diseases and frequent pregnancies sap the vitality of girls and women and limit their participation in educational programmes.
4. *Transportation problems.* Lack of transportation facilities enabling easy access to educational institutions prevents women's participation in educational programmes.

These observations and problems prompted the following recommendations:

1. Women should have equal access to tertiary education programmes and should be encouraged to enter non-traditional areas of education, such as *science and engineering*.
2. Open learning systems should be developed to reach rural women.
3. Tertiary education programmes should assist *rural women* to function in *leadership roles*.

A seminar-workshop on "Fuller Integration of Women in National Development Towards Unity and Progress" held in the Philippines on October 29-30, 1980 produced the following recommendations:

1. nationalize career choices of young Filipinos with a view to assisting males and females in choosing their careers based on their capacities and not according to stereo-typed roles;
2. provide incentives for an increased enrolment of female students in science and mathematics courses and management courses in the areas of science and technology;

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3. provide incentives through scholarships for female students to enrol in traditionally male-dominated courses; and
4. promote instruction and interdisciplinary research on women, particularly with regard to their participation in higher education.

Policies, programmes and strategies

The beginnings of co-educational higher education in the Philippines. From its founding in 1908, the University of the Philippines was co-educational. Females were attracted to such traditionally feminine programmes as education, pharmacy, home economics and nursing. They also enrolled in medicine, dentistry and even in law and administration. While female students did not participate in traditional male courses, such as, engineering, agriculture, forestry and veterinary science, their academic performance was admirable. Of the 90 summa cum laude graduates from 1919 to 1983, 51 (about 57 per cent) were female.

The University of Santo Tomas opened its pharmacy course to women in 1924. A Brother Dominican College, San Juan de Letran, founded in 1620, started accepting women in 1949. Ateneo de Manila University and De La Salle University opened their doors to women in 1973. Ateneo University initially limited female enrolment to its college of arts and sciences, and De La Salle University initially limited female enrolment to 30 per cent of the student population (by 1987 this had been raised to 50 per cent of the student population). San Beda College, founded in 1901, began accepting female students in 1971, but only in its college of law. The fact that classes were held in the evening did not encourage many women to enrol. Some universities, such as Centro Escolar University, which commenced as an all girls' school, later became co-educational (this institution is discussed in more detail in the section on case studies).

The institutionalization of co-educational higher education in the Philippines did not result from any organized feminist campaign; it was more the result of the general evolution of social policy. Co-educational public and private non-sectarian universities have existed for some time, and for the Catholics there were the Dominican schools, Letran College and the University of Santo Tomas. Catholic convent colleges for women date back to the Spanish era. Moreover, increased female participation in higher education was a component of the general expansion of higher education following World War II. In part, the economics of educational expansion demanded co-educational institutions; it is more economical and cost effective to educate the sexes together than separately.

Female suffrage. The 1935 Constitution stipulated that female suffrage would only become a reality after the question was decided by a plebiscite. The results of the plebiscite, held in April 1937, was 447,725 votes in favour of female suffrage and 44,307 opposed.

National legislation for mothers. In 1941 a law granting maternity leave with pay was passed following a campaign by the Philippine Association of University

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Women (presently the privilege is extended only up to the fourth child). Other legislation has provided female workers with job-security and nursery privileges.

Married women. The Spanish Civil Code required the husband to protect his wife and the wife to obey the husband. The new Civil Code changed this to one of "living together, mutual respect and fidelity and mutual help and support".

Summary. There are still traditions in the Philippines which support the notion of "male superiority" which die hard. But attitudes are changing and both legally and socially, Filipino women are starting to enjoy full equality.

In-depth empirical case studies

Institutional profile: The Case of Centro Escolar University

History. Inspired by a new wave of nationalistic spirit which arose around the turn of the century, Librada Avelino and Carmen de Luna became cognizant of a need for an adequate centre of learning for Filipino women, which they envisioned to be non-sectarian but retaining a religious flavour focussing on civic and citizenship training. This led to the founding of Centro Escolar de Senoritas on 3 June 1907. The Constitution and by laws were approved on 10 June 1910. The purpose for which the school was established was "the opening of primary, intermediate, and secondary classes, and later on, the collegiate department, and the teaching of the subjects which refer to physical, intellectual, moral and civic training of the individual".

Centro Escolar started as a modest and well-planned school, with limited resources. But the fame of the first professors, the genius for organization and administration of its founder and her associates, and the commitment of the students and parents helped to secure the school's future.

In 1932, Centro Escolar de Senoritas was granted university status and subsequently incorporated. Centro Escolar University (CEU) became the first non-sectarian university to offer doctoral courses in its graduate school. Thus the change from an exclusive girls' institution to its present co-educational status.

The oldest and main campus is situated in the northern part of Manila, and a second campus is located south of Manila. In 1975 the College of Nursing became the twelfth college to be added to CEU and in 1978, the third campus was established at Malolos, Bulacan. A three-storey concrete building was constructed on a 74,073 square metre lot in response to the national government policy which called for the decongestion of Manila. CEU Malolos has an Integrated School (kindergarten, elementary, high school), four colleges – arts and sciences, commerce and secretarial administration, nutrition, and social work – and a graduate school.

The CEU Library is one of the very few university libraries in the Philippines that maintains a Museum and Archives. The library book and periodical collections on three campuses total more than 100,000 volumes.

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Students. Table 4.23 lists the number of students enrolled in different disciplines at the undergraduate and graduate level: 1975-1976 to 1985-1986. The data suggest an upward trend in enrolment, particularly in the Colleges of Dentistry, Arts and Sciences, Medical Technology, Pharmacy, Optometry, and Nursing. Although the rest of the colleges show a downward trend in enrolment, this is offset by the phenomenal increase in enrolment (65.36 per cent) in the aforementioned colleges. Total enrolment increased from 10,884 in 1975 to 17,998 in 1985-1986. Of the 17,998 students, 17,299 are at the tertiary level.

Table 4.23 Centro Escolar University enrolment figures:
1975-1976 to 1985-1986

	Male			Female		
	1975-76	1980-81	1985-86	1975-76	1980-81	1985-86
Undergrad.:						
Arts & sc.	138	343	861	890	2,129	3,689
Education	-	2	7	188	245	207
Commerce & sec'l. admin.	-	6	106	1,684	2,150	1,163
Dentistry	118	364	1,146	369	1,095	4,024
Social work	6	11	4	526	361	116
Nursing	15	19	90	509	441	762
Pharmacy	-	1	49	713	822	1,033
Optometry	84	97	170	433	784	932
Chemistry	14	26	49	522	504	274
Nutrition/home eco.	-	-	-	895	625	305
Medical tech.	97	67	341	1,241	821	1,478
Fine arts/music	12	18	23	70	55	54
Master of Arts	59	34	16	197	194	145
Master of Sc.	10	8	6	116	136	95
Doctor of Ed.	26	46	34	82	90	55
Ph.D.	24	31	12	58	54	53
Total	603	1,073	2,914	8,493	10,506	14,385

The total population of 17,299 college and graduate school students during the academic year 1985-1986 consisted of 2,914 males and 14,385 females. The predominance of the number of females over the males can perhaps be explained by the fact that CEU started as a school for girls. While CEU students come from all over the Philippines, the majority come from Metropolitan Manila and the surrounding provinces. Of the female students, 59 per cent came from the urban areas and 41 per cent were from the rural areas.

Teachers. In line with the increasing student enrolment is the corresponding increase in the number of faculty members. This is revealed in Table 4.24. In

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Table 4.24 CEU Male and female teachers according to field of specialization

	Male			Female		
	1975-76	1980-81	1985-86	1975-76	1980-81	1985-86
Arts and Sciences	9	15	19	23	32	48
Education	4	2	1	14	14	9
Commerce and Secretarial Adm	5	14	11	35	33	28
Dentistry	8	11	29	13	25	81
Social Work	-	-	-	10	12	7
Nursing	1	3	2	9	20	17
Pharmacy	3	1	1	17	21	16
Optometry	4	5	4	7	15	11
Chemistry	-	1	1	15	21	14
Nutrition/Home Econ	2	4	3	24	19	16
Medical Technology	11	1	2	33	16	20
Graduate School	12	12	12	14	22	13
Music	1	2	1	12	7	8
Religion	-	1	1	10	11	10
High School	2	3	1	42	33	6
Elementary	1	1	1	18	22	10
Kindergarten	-	-	-	4	-	-
Total	63	76	89	300	323	314

1985-1986 the total number of faculty members was 403, consisting of 89 males and 314 females. The College of Dentistry had the largest number of faculty members, followed by the College of Arts and Sciences. It will be noted that the female teachers out-number the males in all disciplines. It is only in the Graduate School where the number of male professors almost equals the number of females.

Table 4.25 lists the number of male and female teachers according to rank. In 1985-1986, the majority of the faculty members held the rank of instructor. The

Table 4.25 CEU male and female teachers according to teaching rank

	Male			Female		
	1975-76	1980-81	1985-86	1975-76	1980-81	1985-86
Instructor	33	55	62	191	228	211
Assistant Professor	13	7	12	50	50	48
Associate Professor	6	-	4	28	19	32
Professor	-	-	-	17	7	9
Lecturer	11	14	11	14	19	14
Total	63	76	89	300	323	314

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number tapers off as the rank progresses through assistant-professor, associate professor, and professor. There were more lecturers than professors. As mentioned elsewhere in the text, lecturers are 'guest professors' from government offices and state colleges and universities who are experts in their own fields.

The teachers in CEU are comparatively young; two-thirds of them are between the ages of 20 and 29 years. In 1985-1986, 145 or about 46 per cent of the 314 female teachers had never been married and 53 or about 60 per cent of the 89 male teachers had never been married. This is the reverse of the national trend with regard to the proportion of female/male teaching staff who have never been married, but is probably a reflection of the youthfulness of the staff.

In terms of educational qualifications, the majority of staff, both male and female, hold bachelor degrees, followed by those with bachelor degrees and some masters units (Table 4.26). Twenty members of staff – 15 female and five male – held doctoral degrees.

Table 4.26 CEU teacher profile according to educational qualifications

	Male			Female		
	1975-76	1980-81	1985-86	1975-76	1980-81	1985-86
Bachelor degree	38	42	58	190	212	197
Bachelor degree with master units	19	17	18	54	69	62
Master degree	4	6	2	38	26	32
Master degree with doctoral units	-	3	6	7	11	8
Doctoral degree	2	8	5	11	5	15
Total	63	76	89	300	323	314

Students' reasons for entering higher education. Interviews with female and male students helped to reveal the factors which motivated their entry into institutions of higher learning. The students were unanimous in saying that the main reason for their participation in higher education was the anticipation of a 'stable job' upon graduation. Students seem to be aware that a high school education neither guarantees them a job nor, more particularly, white collar employment, which seems to be their preference. As one student put the case:

If one has a college degree, it is easier for him to find a job. Besides, the work of a college graduate is lighter. The work awaiting a high school graduate is almost always a tough one; most probably he has to work under the heat of the sun.

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Concomitant with landing a 'stable job' is students' desire for prestige which they associate with their chosen profession. One student remarked: "having a college degree is one way of achieving a bright future", and another said: "I want to pursue higher education so that some day I have something to be proud of".

Students' reasons for participating in higher education do not stop at getting a 'stable job' with its corresponding prestige; employment seems to be regarded as a means to more altruistic ends. Students indicated a desire to help their parents and siblings and to serve the community and society as a whole. This is exemplified by the following remarks:

I just would like to finish a degree course, land a stable job, help my family, my community, and the nation as a whole.

I chose a nursing career, not because of high salary or for the opportunity of going abroad, but just because I want to help other people. I think I will find more pleasure when I hear a simple 'thank you' from a client.

Although the nursing student quoted above did not plan to work abroad, other students expressed their desire to work abroad so as to earn more money in order to better help their families and the community. An optometry student offered this opinion:

My intention in pursuing higher studies is to have a bright future. I'll work abroad so that I can help my parents financially, especially when they can no longer work themselves. When my parents can no longer work, I will have to help my brothers and sisters to pursue higher education.

There are many institutions of higher learning in Manila. When students were asked why they chose CEU, they gave various answers. Most students mentioned that CEU enjoys the reputation of having a high standard in terms of instruction and facilities. They were told of the university's reputation by friends, cousins, siblings and parents. Another reason provided by students for choosing CEU was its friendly atmosphere and pleasant surroundings. The fact that CEU is readily accessible to public transportation was also mentioned.

Student career plans. The students seem to have fairly clearly articulated career goals. Generally, the students plan to work after graduation, to go abroad to work, to establish their own clinics or business, and to practice their professions. Nursing and medical technology students said that they planned to work in local hospitals for a while and then try to find employment abroad. However, the intention was not to stay abroad permanently. Rather, the plan was to return to the Philippines after saving enough money to be able to help their families and others.

Optometry and dentistry students also expressed the desire to go abroad after graduation and return after saving enough money to be able to establish their own

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clinics. Those who already had the means to establish their own clinics and did not plan to go abroad, but intended to practice their profession in the Philippines immediately upon graduation.

Students taking social work, education, commerce and other courses planned to practice their professions by securing employment in government and private schools and offices, or through establishing their own businesses.

Graduates. Table 4.27 lists the number of CEU graduates according to fields of study. The fields of study producing a large number of graduates were arts and sciences, and dentistry. While the fields of medical technology, commerce and secretarial administration, and pharmacy attracted large enrolment, the number of graduates was small because these fields had only been recently introduced and the majority of students were in their first years of study.

Table 4.27 CEU graduates: 1975-1976 to 1985-1986

	Male			Female		
	1975-76	1980-81	1985-86	1975-76	1980-81	1985-86
Arts and sciences	11	46	132	176	475	1,178
Education	-	-	-	34	54	51
Commerce & sec'l. admin.	-	-	7	440	291	199
Dentistry	6	52	199	26	125	910
Social work	-	2	-	52	104	34
Nursing	-	4	-	-	109	58
Pharmacy	-	-	-	82	109	97
Optometry	5	20	16	42	186	159
Chemistry	-	3	4	111	91	77
Nutrition & Home econ.	-	-	-	96	119	58
Med. Tech.	3	12	24	281	118	174
Total	25	139	382	1,340	1,781	2,995

Utilization of higher education. The majority of CEU graduates are making good use of their degrees. Most have joined the workforce and have jobs in which they can effectively utilize their knowledge and skills. One graduate commented that:

I gained a bachelor of arts, majoring in mathematics. I am utilizing my knowledge fully as I am now employed in a government office: the National Economic and Development Authority Statistics Office.

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Our office is responsible for periodic estimates of accounts, among other things, with the main task being the computation and analysis of data.

Another respondent offered this information:

My college degree has played an important role in my life. Right after graduation I took up a teaching position. I taught English . . . and after five years of teaching I was promoted to the position of Guidance Counsellor. I am happy and contented and I have a deep feeling of fulfilment.

Not only do the graduates use their knowledge and skills in their chosen profession, but also in their day-to-day activities:

I am utilizing my college degree in my teaching profession. All that I have learned during my college days in the field of chemistry is being imparted to my students. I do not limit the use of my college degree to my profession. I use my college education in my day-to-day activities at home and in dealing with my co-teachers and members of the community.

My college degree (BSE-history) has been very useful to me since I first started teaching . . . My undergraduate training has indeed provided me with the much-needed basics.

There are cases, however, where the qualifications gained are not relevant to the demands of the job:

The degree I obtained (BS Tourism) from CEU is not relayed to my present work. I work at the office of the Press Secretary in Malacañang as personnel aide which has nothing to do with my degree. However, if I did not have a degree I would not have been considered for the position.

For those few graduates without employment, their non-participation in the workforce is not voluntary. Most wish to work but are prevented from doing so by various circumstances. Some of the women, for example, felt under pressure to stay at home to attend to children. However, it seems that these women plan to join the workforce once the children are old enough.

The successful utilization of their higher education is very evident among the Graduate School Alumni. This is attested to by the fact that seven out of the 13 regional directors are CEU graduates. There are at least six presidents and 12 vice-presidents of colleges and universities and about 20 superintendents and 30 assistant superintendents who are CEU graduates manning the different divisions of schools in the country. In the government and business sectors, a number of CEU graduates

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hold top positions, such as, bureau director, assistant director, and consultant. These achievements bespeak of the functional role of higher education in providing the country with educational managers and public and business administrators.

Conclusions and recommendations

With respect to access to higher education, there are no policies which restrict entry on grounds of gender except in De La Salle and the University of the Philippines' Colleges of Medicine, which limit female enrolment to 50 per cent. Otherwise, female students predominate in most academic programmes. Overall, females account for almost two-thirds of total enrolment. Such fields as commerce/business administration, educational sciences, nursing, pharmacy, and dentistry attract very large enrolment, the majority of whom are female. Except for engineering, the male dominated fields – law, humanities (religion, theology), architecture and town planning, and criminology – do not attract large enrolment. And even in those fields that have a majority of male students, the number of female enrolment is increasing. The females also seem to perform quite well in these courses, evidenced by their examination results and the number of scholarships and awards they receive. Medicine, agriculture, forestry and fishery, mass communication, mathematics and computer science are attracting more female students, both in terms of proportions and actual numbers.

Also, except in engineering, the majority of graduate students are female. Education and the behavioural sciences account for large numbers of women who are pursuing graduate studies, which, in part, reflects the fact that teachers in colleges and universities require masters and doctoral qualifications.

Employment opportunities in colleges and universities appear to be limited, but there is no evidence of gender discrimination in employment.

The opportunity for teachers to engage in research is limited. Formal research requires time, effort and money. Reduced teaching load, release time and research funds are required so that more female academic staff can undertake research.

Other related teaching activities, like student advising, directing co-curricular activities and community outreach, engage the teachers' time more than research. Some schools give extra compensation for these activities, especially for community outreach. They are also given points for promotion purposes for these activities, whether remunerated or not. The unremunerated services often are given extra points.

As with the student population, there are more female than male college and university teachers. Moreover, there does not appear to be any discrimination against females in terms of academic rank. At each level – instructors, assistant and associate professors and full professors – there are more female than male teachers. With regard to lecturers, there are more males than females. But as explained earlier, in the Philippines, lecturers are a special category of specialist teaching staff who primarily teach part-time, usually in the evening, and do so at different institutions.

Female teachers appear to be educationally better qualified than their male colleagues. Proportionately, there are more female than male bachelor degree holders, more bachelor and master degree holders with advanced units and even more doctoral degree holders. When it comes to specialized teaching, especially in the male-dominated professions, there are more male than female teachers. The trend however is toward more female teachers in the field of medicine. In dentistry, there were more females during the academic years 1975-1976 and 1980-1981; however this situation was reversed in 1985-1986 with the males out-numbering the females.

Recommendations

Need for curricular change. There is a need to analyse the curriculum at the higher levels of study in order to provide for the needs of the country. One criticism of the educational system is that it trains graduates to be employed by others rather than for self-employment, especially in the rural areas where almost 70 per cent of the people live.

Public (state) higher education institutions. Privatization is the policy of the present government. The enrolment in private colleges/universities is 91.7 per cent as against 8.3 per cent for the public sector; yet billions of dollars are assigned for the support of public higher education institutions, while private colleges even have to pay taxes on real estate and on profits. The recommendation, therefore, is not to create more public higher education institutions. These have served as pioneers; they should continue to serve as models. But they should not compete with private colleges. In turn, private colleges should be required to observe high standards and should limit their profits to that allowable by the corporation law.

Quality of instruction. In the future, higher education in the Philippines should be concerned more with quality than with quantity. Spoon-feeding and memorization are undesirable teaching methods, even at the lower levels of education. Logical thinking and reasoning should be the standard practice. For the teacher to be secure and unthreatened, her educational qualification must necessarily be of a high order.

Policy-making and administration. Policy and decision-making activities have to be examined differently for public colleges/universities, for non-sectarian and sectarian schools.

Non-sectarian schools can be considered first. Like other stock corporations, the majority stockholders elect themselves to the board of directors/trustees, which is the highest policy-making and decision-making body. In the Filipino family-oriented society, families often entrust their proxy votes to the most qualified members. Thus, there are university/college women presidents and board members. Also, many women are large stockholders in their own right.

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Sectarian co-educational (Catholic) schools are headed by men, called either rectors or presidents. Women's colleges are headed by women designated by their congregations. It appears, however, that when these former convent schools for girls accept men, the female heads are retained. Usually, sectarian Protestant schools are headed by men, but there is one university in Central Luzon headed by a woman.

In state colleges/universities, heads are appointed through the recommendation of the Secretary of Education (now a woman for the first time). In the main, task forces examine the prospective candidates and make their recommendations to the Secretary. There is no discrimination as to sex. One female president, for instance, heads an agricultural college.

In general, women are more than on an equal plane with men at the middle management level, but the top level remains male-dominated. Top management positions are not, however, altogether unreachable for women given the circumstances obtaining in the country where ability and performance are the main criteria for promotion.

The prognosis for higher education for women in the Philippines seems quite good. Filipino women have more than arrived in the field of higher education: as students, as teachers/researchers and even in policy-making and administration. The problem is to keep the hard-earned gains, both in terms of quality and quantity. There is room for improvement with regard to quality. Vigilance, dedication, and commitment are the price for the continuing success of Filipino women in higher education.

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